

THE NEW CHIEF OF STAFF

"Chuck'im out, the brute!" . . . until "the guns begin to shoot"

YOUR Association is not a lobbying organization. We do not buttonhole congressmen, or testify at Congressional hearings. We are in no sense a "gimme"

We did, however, permit our blood pressure to rise a few notches when we learned that the Harden subcommittee was taking another back at service commissaries, and headed for the Old House Office Building to observe the fireworks. There were no fireworks-not even floor discussion. The commissaries received their death blow almost in silence.

The hearings were postponed for some unannounced reason. We did meet a young man who was present to observe the hearings, before the same subcommittee, on another matter. He an nounced his business, and asked ours. A thirty-minute discussion followed, and then we returned to 18th Street in a very dark and discouraged frame of mind.

THE young man, from his wisdom and experience gained as an officer in World War II, let us in on a few

(1) Service people are overpaid.

(2) The perquisites of office, including palatial quarters, add to the overpayment.

(3) Tax exemption on allowances is the final straw.

(4) We do not have a fighting army because the military life is too plush.

(5) Very few military personnel work more than five hours a day.

(6) Retirement benefits should more than make up for the chipping away at commissary and post exchange benefits.

We countered his arguments to the best of our ability-it should have been easy, but here was a man on a crusade as hery as our own. We made him back up at least part of the way on all his points, except, believe it or not, the plushiness of military life and the lack of fight in our Army. He had never heard of S. L. A. Marshall or converted barracks, and didn't care to, particularly.

His final argument was the clincher. Military people don't deserve to get pay anywhere equal to salaries in civilian life because their work isn't productive.

It was at this point we insulted a man who had been an entire stranger up to thirty minutes before and came back to the office in a mood that caused the help to tiptoe past our door.

If planning for, working for, and fighting for the safety of the United States isn't productive, what in the world is? Insurance executives make salaries that put the pay of a colonel to shame, and they do it in air-cooled offices, not foxholes or CPs. If there is any more important insurance than the armed might to stand off an aggressor, we have yet to hear of it.

Is it productive to teach a young man, or hundreds or thousands of young men, to live instead of die in battle?

Is it productive to belly through a

rice paddy on a patrol?

Is it productive to figure firing data so a concentration lands on the enemy at a critical time?

Is it productive to design weapons that insure the country's survival?

Is it productive to plan troop movements so that the right men or the right matériel gets to the right place at the

Is it productive to care for men who are wounded in battle, or sick?

Is it productive to direct traffic under artillery fire?

Is it productive to provide hot meals or even cold C rations to fighting men?

Is it productive to keep a man's records straight so he gets promoted or discharged on time?

This list could go on indefinitely. The answer is, of course, you're damn right it's productive. It's productive of the most important thing this country has-its integrity as a free and independent nation.

THE time has come for soldiers to come back into their own. It's time to reaffirm that soldiering is an honorable profession for the professionals, and an honorable activity for the nonprofessionals. It's time to let the people of our country know that we are productive, underpaid, have lost most of our perquisites to selfish pressure from commercial groups, that tax exemption on allowances doesn't begin to make up for the nomad life that requires the allowances, that our army is a fighting army

and the military life is far from plush, that military personnel put in more hours a day than any other group except some self-employed, and that even retirement benefits have been chipped away in violation of the contract the older soldiers thought they were signing when they first took the oath.

There are dedicated soldiers who would serve regardless of how they are treated by a careless citizenry and a pressure-group oriented Congress. But are there enough of them to insure the economical victories the people and Congress demand? Can our country afford to see college seniors recruited directly by industry at higher pay than second lieutenants, for a five-day-week eight-hour-a-day-job? Can we afford to choke off commissary and post exchange benefits when department stores advertise for help using "20 per cent discount on all purchases" as bait? Can we afford to chisel at retirement benefits when even unskilled labor works under industrial retirement plans?

WE can't find anything in the stated missions of the armed forces that indicates part of their function is to add to the bank accounts of local merchants. We can find evidence that the major of 1930 had a much higher standard of living than the major of 1953; he has lost ground while the civilian in government, commerce and industry has gained

Let's not make service life any more unattractive than it is, to pander to the cupidity of people who believe it is their right to make a living off the soldier who has little say in where he is stationed, and who in the next war may stay home to patronize the store in his home neighborhood if much more is

taken away from him.

Soldiering and politics don't, or shouldn't, mix. Our three million or so votes will never be cast in a bloc; it would be a bad day for the country if they were. But the millions of service people, and their more millions of dependents, whether they vote or not, should receive at least the same consideration as some of the uninhibited pressure groups that are so short-sighted as to tamper with the country's future safety for a few dollars today.



Economy Wave...Airborne

The Scheduled Airlines save the Services Time, Manpower, MONEY!

The Scheduled Certificated Airlines not only save the Military
4 out of 5 per diem dollars paid out in the fastest surface
travel . . . they also save millions in pay dollars! In 1952
these Airlines saved over 13 million military man hours . . .
switched all that manpower from "pipeline time" to
productive duty time . . . saved all the per diem and pay
dollars involved. Moving individuals or large groups, in short
or long hauls — these Airlines offer terrific savings
in time, manpower, money!

INSURANCE

Only on SCHEDULED Certificated Airlines: \$5,000 to \$50,000 at 25c to \$2.50; covers Stateside and much foreign travel—personal or official.

10% DISCOUNT

for official travel on TR's . . covers Full Service.

Saving the Military Millions of Vital Man Hours
with Dependable, On-time, Scheduled Service . . .



THE Scheduled Certificated Airlines OF THE U.S.A.

ALASKA AIRLINES
ALLEGHENY AIRLINES
AMERICAN AIRLINES
BONANZA AIR LINES
BRANIFF AIRWAYS
CAPITAL AIRLINES
COLONIAL AIRLINES
COLONIAL AIRLINES

CONTINENTAL AIR LINES DETA - C & S AIR LINES EASTERN AIR LINES FRONTIER AIRLINES LAKE CENTRAL AIRLINES MOHAWK AIRLINES NOTH CENTRAL AIRLINES NORTH CENTRAL AIRLINES NORTHEAST AIRLINES
NORTHWEST ORIENT AIRLINES
OZARK AIR LINES
PAN AMERICAN WORLD AIRWAYS
PIEDMONT AIRLINES
PIONEER AIR LINES
RESORT AIRLINES
RIDDLE AVIATION

SOUTHERN AIRWAYS
SOUTHWEST AIRWAYS
TRANS-TEXAS AIRWAYS
TRANS WORLD AIRLINES
UNITED AIR LINES
U. S. AIRLINES
WEST COAST AIRLINES
WESTERN AIR LINES

ASSOCIATION OF THE U. S. ARMY

U. S. Infantry Association, 1893-1950. U.S. Field Artillery Association, 1910-1950

PRESIDENT

LT. GEN. GEORGE H. DECKER, USA (Inf) VICE PRESIDENT

GEN. JOHN E. HULL, USA (Inf)

ACTING SECRETARY-GENERAL MANAGER

COL. ARTHUR SYMONS, USAR (Arty)

ASSISTANT SECRETARY

COL. ROBERT F. COCKLIN, NGUS (Arty)

MARGUERITE MATTISON

ASSISTANT TREASURER

N. J. ANTHONY

EXECUTIVE COUNCIL

For the term ending June 1954

MAJ. GEN. WILLIAM H. ABENDROTH, NGUS (Armor)

MAI. GEN. GEORGE C. STEWART, USA (Inf)

BRIG. GEN. HARRY H. SEMMES, USAR (Armor)

BRIG. GEN. ALBERT C. LIEBER, USA (CE)

COL. CHARLES W. McCARTHY (Inf)

COI CHARLES A. H. THOMSON, USAR (Inf)

LT. CHARLES RAMMEL, USAR (Inf)

For the term ending June 1955

LT. GEN. ANTHONY C. McAULIFFE, USA (Arty)

MAI. GEN. EGBERT F. BULLENE, USA

(CmlC) BRIG. GEN. MALCOLM F. LINDSEY, USA-Ret (Inf)

BRIG. GEN. JOHN C. OAKES, USA (Arty)

COL. RICHARD P. OVENSHINE (Inf)

COL. JOHN LEMP, USAR (Arty)

COL. CHESTER V. CLIFTON, JR. (Arty)

For the term ending June 1956

MAJ. GEN. ROBERT N. YOUNG, USA (Inf) BRIG. GEN. VICTOR A. CONRAD, USA

BRIG. GEN. HARRY McK. ROPER, USA (Artv)

BRIG. GEN. CARL H. JARK, USA (Artv)

COL. CAROL V. CADWELL, USAR (CMP)

COL. NED D. MOORE (Inf)

(SigC)

CAPT. JOHN H. BOLTON, JR., NGUS (CE)

S. ARMY COMBAT FORCES JOURNAL The Combat Forces Journal is not the mouth piece of the Department of Defense. The fact that an article appears in its columns does not indicate the approval of the views expressed in it by any group or any individual other than the author. It is our policy to print articles on subjects of interest to the Armed Forces in order to stimulate thought and promote discussion; this regardless of the fact that some or all of the opinions advanced may be at variance with those held by the officers of the Association of the U.S. Army and the editors of Combat Forces Journal.

COMBAT FORCES

PUBLISHED

Col. Arthur Symons, Arty-USAR

ARTILLERY EDITOR

Col. Robert F. Cocklin, Arty-NGUS

EDITOR

John B. Spore INFANTRY EDITOR

Maj. Orville C. Shirey, Inf-USAR

ASSISTANTS TO THE PUBLISHER

N. J. Anthony

Esther E. Bennett

ASSISTANT TO THE EDITOR

Helen L. McGuire

Vol. 4, No. 2

September, 1953

GENERAL MATTHEW BUNKER RIDGWAY, Chief of Staff,	
U.S. Army	er
ON COMMISSARIES AND PRODUCTIVITY Inside Front Cov	er
TO THE EDITORS	
THE NEW CHIEF OF STAFF	8
SALUTE TO THE DEPARTING CHIEF	9
THE PROPER USE OF ARMOR. Lt. Robert S. Harper	10
	11
TRUCE IN KOREA (Pictures)	15
WHEN JOSEPH "GOT IT" FROM THE NEW KING.	
Lt. Col. E. N. Kirsten	16
AND THEY MARCHED, EVERY ONE. Brig. Gen. Edwin H. Randle	18
COUNTERING COMMUNIST ARTILLERY. Maj. Mark M. Boatner III	24
TACTICS OF ATOMIC WAR.	
Col. George C. Reinhardt and Lt. Col. W. R. Kintner	26
CAREER MANAGEMENT AND YOUR FUTURE	34
BUILDING COMMUNITY RELATIONS. Capt. Frederick Jenkins	36
CEREBRATIONS	39
FRONT AND CENTER	
BOOK REVIEWS	

COMBAT FORCES JOURNAL is published monthly by the Association of the United States Army. Publication date: 25th of preceding month. Publication, Editorial and Executive Offices: 1529 Eighteenth Street, N.W., Washington 6, D. C. Copyright, 1953, by Association of the United States Army. Entered as Second Class Matter at Washington, D. C., additional entry at Richmond, Va., under the Act of March 3, 1879.

Circulation Manager: D. A. Mulloy

Assistant: Doris Montgomery

One year \$5.00; two years \$9.00 when paid in advance; three years \$12.00 when paid in advance. Group subscriptions to units and activities of the Armed Forces \$4.50 each when paid in advance. Subscriptions to units and activities of the Armed Forces \$4.50 each when paid in advance. Subscriptions for libraries, civilian groups or activities, and others not eligible for membership in the Association of the U. S. Army \$5.00 per year. Foreign subscriptions \$6.00 payable in advance. For other rates write Circulation Manager, Combat Forces Journal, 1529 18th St., N.W., Washington 6, D. C.

Advertising Director: Robert F. Cocklin

ADVERTISING REPRESENTATIVES

San Francisco Office Duncan A. Scott Company Mills Building San Francisco, Calif. Garfield 1-7950

New York Office 55 West 55th Street New York 19, New Yo Judson 6,4099

Los Angeles Office 2978 Wiltshire Boulevard Los Angeles, Calif, Dunkerque 8-4151

Assistant: Lenna Pedigo

Advertising rates furnished upon request to any of the advertising officer

MILITARY NEWS from the world's largest light plane producer



Introduced to U. S. Army and Marine fighting units in Korea 2½ years ago this month, the Cessna L-19 observation plane is now being used in increasing numbers by National Guard units, too, it was announced recently by Cessna officials in Wichita, Kansas.

The versatile 2-place, 213 H.P. plane—nicknamed the "Bird Dog"—is used in teaching selected Reserve Infantry officers to fly. In addition NG Infantry regiments each receive two L-19s which are used for training personnel in aerial observation of targets and direction of air and ground fire.

Flexible as the L-19 "Bird Dog" has proved to be, Cessna engineers have now done it one better in the new XL-19B—a turbine-powered version of the L-19 that flies on any grade of fuel, even diesel!

Other current Cessna projects are development of a new Navy helicopter, production of assemblies for bomber and fighter planes and research in Boundary Layer Control which greatly shortens the take-off and landing distances required by highspeed aircraft.

CESSNA AIRCRAFT COMPANY, WICHITA, KANSAS

IN ARMY OBSERVATION PLANES AND TURBOPROP RESEARCH





Cessna SETS THE PACE

* To the Editors . . . *

Efficiency Blots

To the Editors:

Like everyone else I have read about the dissatisfaction with the efficiency report system. Most recently I was again sold against it by several letters and one article in your June issue. As a result of all this very inspiring reading which I have done, I have come up with a solution to the problem which has the great virtue of simplicity.

There is in existence a series of standardized tests involving ink blots. Persons taking these tests indicate what particular ink blots bring to mind. My proposal is that the Army reproduce millions of these sheets and replace the efficiency report forms with them. Rating officers could then be instructed to select one ink blot for each officer to be rated. We could then hire psychiatrists and let them decide what the rating officer really thinks about the ratee. No fuss; no feathers.

What was it Mark Twain said about talking about the weather?

LT. J. R. BUETTNER

Box 23, TAS Fort Bliss, Texas

What Would You Do?

To the Editors:

It seems to me that the reviewer of Walter Goerlitz's History of the German General Staff, in your July issue was influenced by a strong and not uncommon American prejudice against the German General Staff. His reference to why the German General Staff failed, to the General Staff involvement in politics, and to the failure of the German General Staff to reject Hitler seemed to fit a neat American conception but not a coherent and realistic appraisal of a body of men.

I have read the book and it seems to me your reviewer missed the two items of greatest significance for the American military reader.

First, there was the General Staff appraisal of German weakness when Hitler first marched. Their estimate for the reoccupation of the Rhineland, for the move against Austria, and for the move against Czechoslovakia was that the French and British power superiority was so great that Germany would be quickly defeated. Hitler made a better appraisal of the democracies' will to fight, and this was decisive. Only after they had lost positions in the Rhineland, Austria and Czechoslovakia, which greatly strengthened the German position in Central Europe, did Britain and France realize that this issue could not be resolved without a readiness to fight if necessary. It may be of some interest to recall western appraisals of German strength in these early crises and judge whether western military men served their diplomats well. It is also a question of some current interest whether democracies characteristically underestimate their power and thereby sacrifice their sound positions in foreign affairs.

The second issue, and this is the main drama of the book, is the General Staff struggle with Hitler. The situation was unprecedented since General Staff training never conceived any but complete loyalty to the Chief of State. General Staff officers with broad unanimity appraised Hitler's plans and policies as ruinous to the German State; yet only a handful went on to the step of plotting political revolt. American officers who are sworn to defend the Constitution might well ask what they would do in a similar situation. If a political opportunist at the head of a gangster organization should obtain the leadership of a national party and control of the Federal government, and should then proceed to circumvent the Constitution with wide popular support to perpetuate itself in office, what would you do? This is the drama which Walter Goerlitz unfolds, using material from the Nuremberg trials to support much of his story.

The conspirators failed. These men, trained to thoroughness in planning and to vigorous execution of plans, were amateurs at conspiracy. Their planning was not thorough and their execution was poorly coordinated. Perhaps these signs indicate the deep inner struggle which continued even in those men who decided that Hitler must be destroyed.

COL. T. A. LANE

Washington, D. C.

Inflation of Rank

To the Editors:

There isn't any record of small unit leaders being increased in rank when gunpowder was introduced into warfare. Captains commanded companies when the repeating Springfield was adopted and when machine guns were added. These weapons supposedly revolutionized warfare, even to the point of making war such a horrible mass slaughter that man would be forced to find more peaceful means of settling his differences.

The argument that a combat company commander should be a major partly because he must employ such a diversity of technically advanced weapons is no more valid today than it was in the time of Genghis Khan.

I believe too many people and agencies are trying to keep rank abreast of technological advancement and that a re-examination of our whole attitude towards rank and job-rating relationship should be considered.

Grandfathers of some years back were not required or even interested in piloting an automobile. Today grandfathers do pilot automobiles. The overall status of grandfathers has not changed but their environment has. So in order to stay even he is required to advance with the forward movement of progress.

The axiom that one either advances or retrogresses applies to soldiers as well as grandfathers. Majors, captains, master sergeants and corporals must keep abreast of rapid advances in order to barely stay even.

I do not agree with the idea of using rank and grade as a pay grade—and that is exactly how rank and grade is being exploited today. If certain jobs or assignments are to carry additional monetary consideration for some specific reason, then I say provide a system of bonuses or assignment compensation to take care of it. Don't increase the categorical rank of the job or the assignment!

If we are not alert to what is happening we will be faced with the necessity of creating super officer rank and super noncommissioned officer grades in order to have the Indians we need to assist all the chiefs.

Has anyone ever thought of reclassifying some of the division, regimental and battalion level staff and command jobs with an eye to reducing the rank-job-rating relationship? Has anyone considered returning to the concept of one-grade advance in rank for each successive higher echelon of command? Has anyone considered deflation instead of inflation as a solution to our problem of top-heavy rank condition?

An officer and a noncommissioned officer in today's Army just has to know more than his former counterpart, that's all!

CAPT. DONALD E. ZIEG

Hq, 135th Inf 47th Inf Div Camp Rucker, Ala.

To the Editors:

I found the article, "Combat Company Commanders Should Be Majors" interesting, but unacceptable. The article was logical in its presentation, but logic is built upon the acceptance of certain truths beforehand. This is where I must disagree with Major Crecelius. I cannot accept certain of his suppositions. It is true that the organization of a rifle company and the duties of its commander become more complex, but this is only relative as all warfare has become more complex. An infantry regiment or division is much more complex and equipped heavier than before, but that doesn't mean that every regiment must or should be commanded by a brigadier general or a division by a five star general.

The Major says that the the company commander should be on a par with everyone else on the battalion staff. Raising the rank wouldn't accomplish anything but a chain reaction of promotions which would leave the situation just where we started. I imagine battalion and regimental commanders suffer by taking guff from above,

They abolished the old buck sergeant in order to enhance the rank of corporal, but a corporal has no prestige or more power, and the sergeant does not have the standing a staff sergeant used to have. So a buck sergeant replaced the corporal as squad leader and the staff took over from there. I don't think we have better squad leaders and the system hurt the noncoms' prestige.

2D LT. ROBERT CEDER

Hq & Svc Co. 198th Tk Bn Camp Atterbury, Ind.

Machine Guns

To the Editors:

Lieutenant Gobus's article on machine guns (April issue) was, he stated, the product of a great deal of interest and thinking in that important matter.

But Lieutenant Gobus did not include in his work a few more needed improvements that many who have used the weapons "when the chips were down" think we need.

First of all let's set things straight on the weight of our machine gun. Most men can easily lift and carry a burden that weighs as much as the machine gun—if it is in a convenient shape. I believe improvement in shape is more important than in weight. Further weight is a factor in accuracy.

Then there is head space. Improper head space setting accounts for most of the jamming and misfires that occur in our 1917 vintage machine gun. The gunsmith that makes and sells a gun with a more foolproof headage adjustment than we now have will have made a buddy of every machine gunner who temporarily lost his religion while seeking a tool to turn the barrel six or eight clicks or who had to dismantle a hot gun to get a jammed cartridge out of the chamber or those of us with a short memory who can't remember from time to time if it was eight or eighteen clicks on "this one."

SGT. WARREN A. GARROTT 1st Guard Co. USDB Fort Leavenworth, Kan.

Caption Writing

To the Editors:

Congratulations on printing "The Red Flood" in the July issue. Information concerning our enemy is as vitally important as keeping informed on our own armed forces. Here's hoping I will see more such articles in the JOURNAL in the future.

However, after reading it I was a bit dismayed at the caption to the photograph on page twelve which began, "In the days before Hitler's madness unleashed the Red Flood . . ." In the first place, that the Soviet army was given the opportunity to occupy large parts of Europe was probably the fault of Hitler's optimism (and his General Staff's), not of any insanity on his part. I gather this from my reading of



Chase Assault Transports are now performing, as routine; functions which previously were deemed impossibilities—the delivery—ready for action, of heavy arms and equipment directly to front line areas, by landing in small unprepared fields.

Recent demonstrations of this new technique have proven beyond doubt that its potentialities for revolutionizing present military concepts are unlimited.

Chase Assault Transports ruggedly built to absorb the withering punishment of front line missions, stand alone.





offers you, as an officer, homesites adjacent to the Club, special purchase privileges, and the apportunity to become a Club member.

Live in a beautiful, outdoor community, close to Fort Ord, Monteray Presidie, and the Naval Postgraduate and General Line Schools. The specious Club has its own golf course, bathing pool and tennis courts. Many of its members are retired Officers.

Write for illustrated book.

DEL MONTE PROPERTIES COMPANY
Box M, Pebble Beach, California

Changing station? Don't forget to notify us of your change in address. Simply send your name, old address and new one to:

Circulation Manager Combat Forces Journal 1529 18th St., N.W. Washington 6, D. C.

SPECIAL AUTOMOBILE FINANCING SERVICE AND LOANS

To Commissioned Officers & Warrant Officers Wherever Located

Minimum restriction on the Movement of Cars Overseas



This organization founded in 1924 by a group of retired officers specializes in rendering financial assistance to officer personnel.

FEDERAL SERVICES FINANCE CORPORATION Mashington 6, D. C.

Alexandria, Va.	113 5	No. St.	Asaph	81.
Augusta, Ga Marion	Bid	a., 739	Broad	St.
Bethesda, Md 46	50 Ea	st We	st High	way
Columbus, Ga.	32	57 Vie	tery D	rive
Henolulu, T. H.	1410	Kapi	olani B	livd.
Long Beach, Calif	110	Ocean	B ule	vard
Louisville, Ky		606 8.	4th 81	reet
Panama City, R. P.	Ave.	Nacie	nal No	. 29
Warrington, Fla.	3	(Nav)	Boule	vard

Heinz Guderian's *Panzer Leader* and he seems to have been in a position to know more about it than your caption writer.

Regardless of whether it was madness or optimism on Hitler's part, the dismaying thing is the implication. After reading Dr. Rosinski's article, to me Red Flood is synonymous with the wanton savagery unleased during the Russian offensive, not with the offensive itself. Thus the caption is saying that Russian barbarism was excusable in lieu of Hitler's bad deeds.

JAMES W. MITCHELL, JR. 6403 West Grace St., Richmond, Va.

 Our feeling is that Mr. Mitchell has read something into the caption that few other readers read and certainly not what the caption writer intended. We take the criticism in good spirit and thank Mr. Mitchell. It is never out of order to remind an editor that written words are powerful and sometimes deceptive.

FSCC

To the Editors:

I would like to comment on "FSCC—Battlefield Teamwork" by Captains Powers and Wallace in the May issue. I feel that there is a need for clarification of certain matters dealing with personnel, operational procedure, and location of the Fire Support Coordination Center.

It would appear that the authors have to some extent lost sight of the purpose of fire support coordination. Basically, there is nothing in the principles of the FSCC that has not been done for many years by successful commanders. The FSCC was established to relieve the commander of the burden of personally handling the details of coordinated fire support.

For years many units have prepared fire plans for supporting weapons. Too frequently a separate fire plan has been prepared for field artillery, mortars, air support and direct fire weapons, with little or no connection between them. To carry fire support coordination to its logical climax, I feel that the commander should visualize where fire will probably be needed to support his plan of operation and have all weapons, organic, attached and supporting, prepare to fire on all of these areas.

The draft training circular, "Coordination of Fire Support," published by The Artillery School, 1 April 1953, may not have been available to the authors when their article was written. In the foreword of that circular this statement appears: "This coordination [of fire support] is effected without adversely affecting any of the present methods used in the rapid delivery of fires essential to the support of operations." To me this means that requests for fire on targets of opportunity will be handled in exactly the same manner as now. The mortar or artillery forward observer will forward a fire request directly to the appropriate fire direction center and the FDC must forward all information concerning these targets to the FSCC, but

must not delay the fire requested until a decision is made by the FSCC; nor can all fire requests be forwarded through the successive FSCC's until it reaches a fire direction center.

An FSCC is primarily a planning agency during the planning phase of an operation and handles the interchange of information between organic, attached and supporting fire support means during the operation; and at the same time planning for the subsequent needs of the supported unit. The fire support coordinator and the representatives of the other fire support means handle the details of coordination, based on the supported unit commander's combat orders, policies, priorities, or individual decisions. The responsibility for fire supported unit commander.

The article also makes no mention of the role in the FSCC of the Regimental S3 Air, other than a brief comment in passing. Nowhere in their discussion of the operation of the FSCC or in the example of "a day in the FSCC" do the authors mention the S3 Air by name as being a part of the FSCC.

Yet Training Circular 23, "Coordination of Fire Support," and proposed changes to it, all cited in the article as the basis for fire support coordination doctrine, state clearly that the S3 Air of the supported unit is one of the key links in the coordination which goes on within the FSCC, with certain designated and specific responsibilities including, but not limited to: preparation of the offensive air support plan, and assist in integrating it into the fire support plan; initiating and processing requests for air support; maintaining liaison with G3 and S3 Air officers at higher and subordinate echelons on matters pertaining to tactical air support; coordination of air missions with other supporting fires; arranging with other members of the FSCC for flak suppression fires, target marking by artillery or naval gunfire, and suppression of friendly fires as necessary.

It is not that the authors have delegated these duties by name to anyone else, but by ignoring what I feel is the important role of the S3 Air in the operations of the FSCC, they lead the reader to conclude that air support matters are handled directly by the fire support coordinator or his artillery S3.

As to the location of the FSCC, the article states that, "the FSCC can be located at either the artillery headquarters or the supported force headquarters. It may or may not include the artillery fire direction center (FDC)." Now, TC 23 originally specified that the FSCC would be the FDC of the organic supporting artillery echelon, augmented by liaison representatives of naval gunfire and close support agencies. But it further stated that "the FSCC usually should be located adjacent to the supported unit command post in accordance with artillery doctrine . . ." However, proposed changes to TC 23 state that "at all echelons where an FSCC is established, it is desirable that it be located within or immediately adjacent to the command post of the command for which fire support is provided." With relation to the FDC of the supporting artillery, it states that the primary requirement for its locations is that it be able to control the fires of its subordinate units. "When the individual requirements of the FSCC and the artillery FDC do not conflict, insofar as locations are concerned, they may be located together or in the same general vicinity. When these requirements do conflict, the FSCC and FDC should be separated."

This can be interpreted that the FSCC remains at the supported unit headquarters. If the FDC can effectively operate at the same place, well and good, but if not, then the FDC must be located where it can control the fires of its subordinate units (at the artillery battalion headquarters or wherever the situation dictates). I cannot agree that the FSCC would be located at the artillery battalion command post in any case, unless, of course, the artillery CP and the supported regiment CP were at one and the same place. Yet the article states that the FSCC can be located at either place (when the two headquarters are separate). This appears to be contrary to established doctrine.

The article also states that one of the members of the FSCC staff is the forward air controller (FAC) from the supporting Tactical Air Force. I cannot see how the FAC could carry out his function of directing close air support strikes in support of front line units if he were located, as the authors state, in an FSCC located at artillery battalion headquarters. Actually, while he may be consulted as to the suitability of targets for air strike, and in an advisory capacity on the employment of tactical air, the FAC's job during daylight hours is to control tactical aircraft supporting the ground elements, and while he should maintain contact with FSCC, he will be spending most of his time in observation posts where he can actually see the targets and direct planes onto them. But he is normally attached to the infantry unit, and would have no business back at artillery battalion headquarters, if the supported and supporting units had two separate command posts.

This is no attempt to belittle the role played by the artillery coordinator in the FSCC or his artillery S3, nor should it be interpreted as an argument that the Artillery \$3 is not normally the man who determines what available supporting weapon shall be used on any given target. But his job is more one of coordinating than initiating, as far as close air support is concerned, and current directives clearly indicate that it is the infantry commander (or his delegated staff representative) who is responsible for initiating, planning and processing tactical air support, coordinating his efforts at applicable levels with representatives of the Tactical Air Force and the supporting artillery echelon. The FSCC is the installation where such coordination is carried out.

COL. CHARLES F. MUDGETT, JR. The Infantry School Fort Benning, Ga.

The Authors Answer

To the Editors:

We appreciated your forwarding to us the letter from Colonel Mudgett. Many of his comments are in agreement with our article. I would like to say first that our article was an attempt to sell fire support coordination and to fill in the gaps in the training circular on the subject. We certainly did not want to rehash the many arguments and fixed policies that have already been set forth in numerous publications on the subject. We wanted to give the artilleryman and infantryman a feel for the business.

I would like to comment on four of Colonel Mudgett's points.

Fire request channels. Yes, the TC was available to us. Since the FDC and the FSCC were together in our article, there would be no delay in handling the fire requests.

S3 Air omitted. We should have included more on the function of the S3 Air, an infantryman. That was an unfortunate omission in the main discussion although we did mention him later on in connection with the combat example of an FSCC. It seems we were too concerned with the artillery aspect of the picture.

Location of the FSCC. The draft training circular on fire support coordination dated 1 Apr 53 in par 9a (2) states that the FSCC can be anywhere the force commander wants it. It may be desirable to locate it at the infantry CP but we think it can be worked out to better advantage at the FDC. This was the experience of the 187th Regiment Combat Team.

TACP at the FSCC. Since there are four TACPs with each regiment, where are you going to put the fourth? We said at the FSCC where he can put his communications and professional knowledge to the best use. Again, this worked well in combat.

We thank Colonel Mudgett for his excellent comments. Through such discussion these problems can be solved.

CAPT. PATRICK W. POWERS

Box 1267, AA&GM Br. TAS Fort Bliss, Tex.

IMMEDIATE SAVINGS Savings to 3 Available UNLY to officers and 1st 3-grades non-commissioned officers. IMMEDIATE SAVINGS UP TO . . . 30% . . . from prevailing board rates which apply in your territory can be YOURS on this complete, low cost Automobile Insurance Policy. GOVERNMENT SERVICES INSURANCE UNDERWRITERS can reduce costs to you because they deal direct with a highly selected and specialized class of policy holders. Protection against loss from bodily injury and property damage, liability . . . medical payments accidental death . . . comprehensive personal liability . . . comprehensive fire and theft coverage. Covers collision damage to your car. Covers towing. Remember, once a policy holder, INSURANCE is always available to YO your problems, will handle your policies in our office. HOUSEHOLD CONTENTS FLOATER POLICY This Floater Policy covers everything personal anywhere in the U. S. or abroad. It protects your household goods, clothing, uniforms, furniture, jewelry and valuable personal effects. Insures you against 14 named perils. Greatest coverage protection at lowest cost, GOVERNMENT SERVICES INSURANCE UNDERWRITERS (NOT AFFILIATED WITH U.S. GOVERNMENT) GOVERNMENT SERVICES INSURANCE UNDERWRITERS MAIL CROCKETT AND PRESA STS. SAN ANTONIO, TEXAS THE COUPON ADDRESS AGE RANK MARRIED SINGLE FOR CAR DESCRIPTION ANNUAL MILEAGE FULL BUSINESS USE? DRIVERS' AGES ... DETAILS 2 GREAT POLICIES FOR PREFERRED ARMY PERSONNEL

THE NEW CHIEF OF STAFF

He is a soldier who knows his trade and the ways of men who practice it



General and Mrs. Ridgway are greeted by Secretary Stevens

WHEN the late Lieutenant General Walton H. Walker was killed in a jeep accident in December 1950, the Eighth Army was approaching a crisis. Terribly hurt by the disasters that had piled in on it following the Chinese intervention, Eighth Army had become so beset by calamity, so tired in body and spirit, that its future was uncertain. What could move Eighth Army out of the state of despair into which it was drifting?

It is easy to see now that what was done and said was the right thing to do and say, but it wasn't easy to see it then. If Eighth Army was going to snap out of it, it would be because it was given an incentive that made sense out of the situation that existed at the moment. And so it is to General Matthew Bunker Ridgway's credit that he flew out from Washington, took a business-like look about, and gave it to Eighth Army straight from the shoulder: "The job is to kill Chinese," he said.

This made sense to Eighth Army. This was Old Pro talk; soldier talk. To Eighth Army the blunt, forthright words meant survival: kill enough hordes and we survive. Survival is something an army understands, for one of its axioms is security, which is but another way of saying an army must survive.

So Eighth Army was turned around and went about its grim business with such dispatch that experts have since said that it became the finest army the United States has ever fielded.

That the blunt words of General

Ridgway became one of the imperishable lines of prose from the Korean Conflict is less important than the immediate effect they wrought. But it must be added that the words (and the photographs showing the General going about Korea with grenades strapped to his chest and an automatic on his hip) made the American people conscious that Eighth Army was an army created and held together by the pros, young and old, wearing from three stripes to four stars.

Words were only part of the cure. General Ridgway is remembered by thousands of men who saw him in the front lines, on the outposts, at the regimental, battalion, and even company headquarters—talking to the men, encouraging them, correcting faulty tactics, praising ingenuity and daring. He was in the depots, and in the ration dumps; he was at the construction jobs and in the gun pits—and the impact of his personal leadership was the tonic that started the Eighth Army on the way to what it became under the equally great leadership of General Van Fleet.

T was natural for General Ridgway to appeal to Eighth Army in soldier words. For all six feet, 200 pounds, and fifty-eight years of him are professional. He was born into the Army at Fort Monroe, grew up an Army brat, and made his soldier-life official as soon as he could by entering West Point when he was seventeen.

None of this is unusual. For many sons of professional soldiers have lived out full and useful lives as professional



He huffed and puffed up the Korean hills—and Eighth Army responded to his inspiring presence

COMBAT FORCES JOURNAL

soldiers, content and proud and unwanting any other life. Nor is General Ridgway the first Army brat to become Chief of Staff. And this is not peculiar to the military profession: all professions are familiar with sons who follow in the footsteps of their fathers and sometimes press their own steps deeper and larger in history as General Ridgway is doing.

Chiefs of Staff are invariably men of great professional competence. A few of them have been little more than competent soldiers and a few of them have been much more—big men whose competence was enlarged by knowledge and understanding that ranged far be-

yond professionalism.

To speculate as to whether General Ridgway will emerge as one of the great Chiefs of Staff would be preposterous. Greatness is relative and can be measured only against the backdrop of history yet to be undraped. But this much can be said. All the evidence suggests that General Ridgway has a great deal more than professional competence going for him. His record as a field soldier-an early paratrooper and first com-mander of a U.S. airborne division to engage in an airborne assault, and his superb command of Eighth Army-are its highlights. He was also a highly competent staff officer at all levels; he left the Pentagon where he was Deputy Chief of Staff for Operations and Administration to take over Eighth Army.

The record also shows that General Ridgway is as adept at subtle and complex diplomacy as he is at throwing grenades. Since 1927 he has mixed conventional command and staff duties with duty on special military-diplomatic missions in all parts of the world.

He was a member of the commission appointed in 1929 to reconcile the Bolivian-Paraguayan boundary dispute.

He was liaison officer to the Insular Government, Philippine Islands, 1932-33.

He was Senior U.S. Army representative, Military Staff Committee, United Nations, 1946-47. This committee wrote an eighty-page report on how an international military force could be organized for the use of the United Nations.

He was Chairman, Inter-American Defense Boards, 1946-48, and in 1950.

On his last two assignments, in Tokyo and Paris, he combined his talents for command and international counsel. As Supreme Commander, Allied Powers, Japan, and as Supreme Commander, Allied Powers, Europe, General Ridgway worked closely with civilian and military representatives of allied governments and always in the larger interests of the United States and the world.

The report on the U.N. security force was hailed by one observer as "the first, albeit faltering, step towards an international police force." General Ridgway himself publicly stated at the time that while we could not then place our security in the hands of the United Nations, such "is our hope and objective for the future."

A few years later in the same vein but more affirmatively and in nobler language, he was to tell Eighth Army:

"The real issues are whether or not the power of western civilization, as God has permitted it to flower in our own beloved lands, shall defy and defeat Communism; whether the rule of men who shoot their prisoners, enslave their citizens, and deride the dignity of man shall displace the rule of those to whom the individual and his individual right are sacred; whether we are to survive with God's hand to guide and lead us, or to perish in the dead existence of a Godless world.

"These are the things for which we fight. Never have members of any military command had a greater challenge than we, or a finer opportunity to show ourselves and our people at their best and thus be an honor to the profession of arms, and a credit to those who bred us."

THE truce in Korea is new and uncertain as General Ridgway takes over as Chief of Staff of the Army. History is at the crossroads and whatever direction it may take, the next few years cannot be easier than the last few. As an Old Pro, General Ridgway will know how to draw sustenance from the roots of the Army and at the same time give it back greater strength through forceful and wise direction.

SALUTE TO THE FORMER CHIEF

DETACHED look at the last four years will suggest that General J. Lawton Collins deserves the thanks of the nation, not for the condition of the Army as he left the chieftainship, but that there was an army to leave. Certainly some of the tasks imposed on the Army during the past few years would have destroyed it had they not been met capably and with heads-up vigor.

The Army's greatest progress under General Collins has been in weapons and equipment. The new family of tanks went into production because General Collins insisted on it. He backed the atomic gun. He gave his support to the guided-missile developers and saw the NIKE missile become a usable surface-to-air weapon. A new family of improved radios went into production, the helicopter became a most useful combat and logistical tool, and new trucks and personnel car-



GEN. I. LAWTON COLLINS

riers came out of the testing grounds.

General Collins had less success in establishing firm and effective policies that would get the Army the manpower it needs quantitatively and qualitatively. Not that he didn't see the problem and not that he didn't try. The failure is the failure of the citizens of this nation—who, on the record, are unwilling to ask their sons to serve longer even though their chances to escape being maimed or killed in battle is proportionate to the amount of training they receive. This same attitude is largely responsible for the emergence of a seldom-heard thing: outspoken criticism of their lot by Regulars of all ranks.

In his new assignment as the representative of our Joint Chiefs of Staff on the Military Committee and Standing Group of NATO, the Army wishes General Collins its best, happy that his counsel will still be used.

THE PROPER USE OF ARMOR

LIEUTENANT ROBERT S. HARPER

AS an armored soldier I have watched the Korean campaign test the present infantry division tank organization under combat conditions. My findings are that we are fortunate to have made the test against an army poorly equipped and trained for armored warfare. These conditions spared us losses that might have resulted from the misuse of small units of armor by commanders inexperienced in the use of tanks. Contrary to popular opinion, this situation is not correctable by the simple expedient of more armor training for all infantry commanders. Training will correct tactical deficiencies; however, the infantry division tank units are the victims of deficiencies that can be corrected only by reorganization.

So it is my firm belief that tanks used to support infantry should be organic to the field army, not to individual regiments. It is obvious that an infantryman cannot survive on ground where tanks can roam. In such areas the tank is and will remain the pivot of effective defense and the point of decisive offense.

Infantrymen and tankers will agree on the need of effective antitank protection. However, there is a serious, perhaps fatal, divergence of opinion about how this protection is to be provided. Infantrymen believe that most tankers will not fight. Consequently, they are convinced that any attempt to modify the present command relationship between the two forces is a flimsy excuse to avoid duty. Many infantry commanders believe that tanks will seldom be seen forward of the

(Continued on page 13)

Caption on this official U. S. Army photograph, released on 21 March 1951: "Crewmen clamber to safety as an M-4



LIEUTENANT ROBERT S. HARPER, Armor, has served two tours of duty in Korea with the 72d Tank Battalion. He is presently the commander of Company B, 325th Tank Battalion, Camp Irwin, California.

TANKS AND INFANTRY

COLONEL EDWARD L. ROWNY

tank hits antitank mine. Infantrymen rush to the scene as the tankmen make a break for it somewhere in Korea."



THE increased tempo of "shop talk" makes it clear that we soldiers need to do more thinking about how we use armor. There appears to be too much talk of tanks versus infantry and too little of tanks and infantry.

After analyzing World War II experience the European Board of General Officers concluded that proper tank support for infantry made it mandatory that tanks become an organic part of the infantry division. As a result the Army placed a tank company in each infantry regiment and a tank battalion in each infantry division. Since that time we have had ample experience in training in the United States and Europe and in combat in Korea to warrant a re-evaluation of that recommendation.

We are constrained to ask: What have training and combat experience taught us? Is the tank, in fact, essential to the infantryman's mission?

The overwhelming bulk of training and combat reports say that the desirability of having tanks work closely with infantry has been demonstrated. These reports imply, and in some instances state outright, that the tank has become a vital weapon. The former infantry-artillery team is now the infantry-artillery-tank team.

THERE are three critical phases in most attacks. The first is the breaching of the enemy's outposts. The second—and most important phase—is the assault on the enemy's holding force. The third is the consolidation of the newly-won position. The execution of this first phase

COLONEL EDWARD L. ROWNY, Infantry, is on duty at The Infantry School. He is a 1941 graduate of the Military Academy and was commissioned in the Corps of Engineers. He transferred to the Infantry in 1952. almost always requires a special effort to break through the security echelon. Once this penetration has been accomplished the going is usually easier until the outskirts of the enemy's main defenses are reached. It is from this point on, during the critical advance across those last fifty yards, that attacks stall and fail.

Indirect supporting fires can advance the foot soldier, if he is well-trained, well-led, and "leans into his fires," to the very edge of the enemy's positions. But then these heavier fires must shift to deeper targets. The outcome of the battle from that moment on depends upon the violence and speed of the assault and upon the effectiveness of direct-fire weapons. It is significant that the tank is the only non-portable weapon which can accompany the infantry and participate in this final assault. The accuracy of the weapon, its mobility and armor protection allow the tank to assist the infantry in this, the most critical phase. Infantry and tanks, working together, are the most effective method yet found for killing or capturing a determined enemy force.

Once the enemy's position is overrun, the third phase occurs: that of staying on the position in the face of local counterattacks. Tanks form the centers of resistance of tank-infantry teams that are able to repel these attacks.

What about the defense? Here again, we find that infantry-artillery-tank combination is the most capable team for doing the job. The tank is well-armed, well-protected, and easily placed in position. As some have said, this is an expensive way to use tanks. But continued enemy pressure and the lack of time often make the tank the *only available* "bunker." Further, it is a redoubt which can be moved to become a defensive installation elsewhere. Then again, it is an ever-present weapon, capable of assisting the infantryman in a counterattack or in an attack to gain a more favorable defensive position.

We should not forget that the tank is still our best antitank weapon. At the present time the tank appears to be the only weapon which is consistently effective against enemy armor at ranges beyond 1000 yards. Until a more effective is proven, tanks must protect our infantryman from the attacks of enemy armor. The Russians, in their attack against the Germans in World War II, used tanks to assist their infantry. The North Koreans used what tanks the Russians gave them in the same way.

Readers of military history may form various opinions of the validity of use of tanks in mass. Few, however, will be able to deny that the Russians defeated the Germans time after time through their use of infantry-tank teams. To be sure, the West Germans have not allowed this lesson to go unheeded. Believing that they will have to bear the brunt of the first Russian blows, they are organizing "tank-accompanying" units.

WHAT is the proper place within the infantry division for these tanks which are to fight with the infantry: at regimental or at division level? What are the advantages of tanks organic to the infantry regiment? There are two. First, it makes the tanks immediately available to the front-line soldier at all times; and secondly, it permits and fosters an intimate relationship between the tanker and the infantryman. Even with the best intelligence, the speed of infantry-tank assaults by the enemy is such that by the time the tanks can arrive from central locations within the division to forestall an enemy attack, the chances are that our unit will have been overrun. Furthermore, the need for tanks for defense against enemy armor becomes even greater when atomic weapons are used tactically. This calls for dispersion of battalions, not individual soldiers. As a consequence, this increase in distance between units increases the time it will take to get tanks to a threatened area. And finally the continuity of action afforded elements integrated within the same fighting unit is a great advantage. The team can attack, then defend, and then attack again, each move proceeding quickly and efficiently from the former.

The second argument for keeping the tanks within the infantry regiment is that it builds an intimate relationship between the tanker and the infantryman. This is the more significant of the two arguments. Attacks succeed when there is *esprit de corps* and mutual confidence among the parts of the team.

It may be that most of the disappointments connected with World War II experience can be attributed to the inadequate-or improper-training of tankers with infantrymen or infantrymen with tankers. Be that as it may, several infantry-tank attacks within infantry divisions in Europe in 1944 and 1945 with which I am familiar ended in failure. In Korea, not a single combat action of the 38th Infantry during my tour with it failed to be enhanced by the action of its organic tank company. I mention this personal experience not as conclusive evidence but to show that some experience-although limited-lies behind these otherwise theoretical arguments.

SO much for the reasons for keeping the tanks within the regiment. But what if these regimental tanks were centralized in a second battalion at the division level? Does this type of organization offer any advantages? The answer is yes, certain advantages would accrue from such a move. Centralization would simplify the problems of technical training and would make maintenance more efficient. It would make it easier to mass tanks for operations where a heavier proportion of tanks is desired.

But while technical training would be simplified, the more important and more difficult type of training-tank-infantry training-would be made more complicated. So it comes to this: Is centralization of the regimental tank companies for technical training preferable to the decentralization necessary to accomplish the job of training the infantry and tanks to fight together? Is centralized maintenance so very much more efficient and economical? What is the cost of maintaining the tanks if they are kept within the regiment? Do we save so many men that we can justifiably ignore the better training and superior combat performance of our units?

A thorough study of these questions cannot be resolved beyond the admission that theoretically the maintenance at the battalion should be cheaper—and probably is. But the question becomes: is this too much to pay for the advantages which accrue? A conviction, shared by a great many regimental and division commanders in Korea, is that the extra cost of regimental tanks is a very reasonable price to pay for the benefits we get from them.

This opinion does not contradict the fact that keeping the tanks at division level offers the opportunity of having two or three companies of tanks available to work with infantry units that need them. But this alternative becomes prohibitive, if it means stripping the regiments of tanks. I realize that such an argument can be interpreted as being narrow and one which pleads the case of the regimental commander against the broader view of the division commander. The alert and aggressive division commander, it can be argued, has access to more intelligence, can see the "bigger picture" and can anticipate the situation. He can train the tanks with a regiment and place them with the unit in time to be fully effective. Practically all arguments on organization can be pleaded in this manner, many of them leading to absurd conclusions. The point to be resolved here is where in an infantry division is the tank most efficiently and usefully employed. It is my conviction that this level is the regiment. Even with the best training the tanks supplied to a regiment by division would not fight as effectively as those tanks which the regimental commander commands. Also if a division commander were given two battalions of tanks he would invariably attach one company to a regiment thus forming tank-infantry teams as a normal, habitual rule. This he would do because it is in the companies that the need for tanks exists.

The infantry-tank-artillery team is

here to stay. I do not question the value of massed armor as used by armored divisions. But I do believe in our new three-unit team, too. I believe that tanks within an infantry division will be used most often—and in more important roles—as decentralized teams. I further believe that any teamwork short of full-time close association of tankers and infantrymen will cause the teams to come out second-best.

Finally I believe that if the number of tanks to be produced falls short of total requirements the infantry regiment should be the last unit to be denied the organic tanks it needs.

THE PROPER USE OF ARMOR

(Continued from page 10)

Division CP unless tank companies remain as organic elements of infantry regiments. These sincere soldiers seem obsessed with the conviction that only organic armor will obey orders. What guarantee, they ask, do we have that the tankers won't pull out at the first round? They have none. Nor do we tankers have any guarantee that the infantry will not panic. Cowards don't read tables of organization.

LET'S look at this more calmly. Military science isn't pure theory. Battle is the test tube of armies and the final arbiter of tactics, training and organization. The present divisional tank organization has failed its initial test in battle.

In October, 1950, a board of armor officers from the 2d Infantry Division convened to evaluate the combat lessons learned up to that time in Korea. One of their first recommendations was to reorganize the regimental tank company, forming a second tank battalion organic to the infantry division. The reasons for this recommendation are not hard to understand. In most cases the tank company commander was the only officer in

the regiment with any practical knowledge of tanks. Therefore, the standards of discipline and training were established by the individual tank company commanders with little competent supervision from regimental headquarters. In those rare instances where the companies were commanded by exceptionally well qualified officers, the tank companies were unusually good. However, we must admit that not all armor officers in those assignments were capable of maintaining acceptable standards without command supervision or technical assistance. In many cases, unfortunately, the regimental commanders relieved armor officers who commanded tank companies and replaced them with infantrymen, because they found that infantry officers with no preconceived ideas of the proper employment of armor were capable of a higher degree of cooperation in the misuse of tanks than were armor officers. Since neither the regimental commander nor the tank company commander understood the proper use of armor, it inevitably occurred that these companies were reduced to the status of infantry units, with tanks instead of MIs as their

basic weapon. The full capabilities of the tanks were never realized.

The armor soldier assigned to a divisional tank unit finds that he has left behind the tanker's concept of the offensive in which the only safety lies forward, and has entered a world dominated by the caliber .30 bullet. It often seems that it is a world of baseless, abject fear until he witnesses the effect of a concentrated mortar barrage and observes that a caliber .30 round will penetrate a fatigue jacket. No infantry commander can ignore these brutal facts. For him the spectacle of an M32 dragging away a blackened, inanimate armored object does not hold the same emotional impact as the sight of a muddy litter jeep evacuating the broken bodies of beloved infantrymen. Regardless of the amount of armor training he gets, he will expend every force, including his tank company, to prevent the loss of Baker Company. He could not react otherwise and be an infantry commander.

WE cannot challenge this attitude. But we can plead that the indiscriminate misuse of armor, the decisive instrument of ground warfare, will insure tactical suicide on a future battlefield.

By today's T/O&E, the eighty-nine infantry divisions activated during World War II would require more than 12,000 tanks. The futility of such a force becomes apparent when we consider that none of these tanks can be used in units larger than battalions. Half of them will be reserved for separate companies that are committed at the discretion of individual infantry commanders.

In May 1940 the French Army committed its infantry divisions and their organic tank battalions against the advancing Germans. They were destroyed piecemeal. The German Panzers were numerically inferior to the combined strength of the French armored formations, but General Guderian concen-



SEPTEMBER, 1953

trated his armor into one powerful force. This organizational superiority was the key to victory in the West.

When the Russian tank armies began their offensives against the Germans, Hitler disbanded some of his Panzer divisions, distributing the tank companies to infantry units in an effort to capitalize on the beneficial morale effect of apparent local tank superiority. He discovered, as had the French, that small groups of tanks operating independently to exploit their psychological effect on friendly infantry were no match for enemy tanks employed in mass.

It is dangerous to ignore these lessons.

DON'T propose that armor cast off its traditional responsibility of protecting infantry units, crank up all its tanks and go smoking over the far horizon in hot pursuit of some mythical enemy. But I do say that infantry commanders must realize that our responsibilities for protecting their units can often be accomplished better by massing all tanks organic to the infantry division and engaging the enemy in his assembly areas before he can bring fire on our infantry.

The tank requirements of an infantry unit do not remain constant, but vary according to the type of terrain in which that unit is operating. But under the present organization we can provide effective support in terrain where attack by enemy armor is unlikely. However, as the regiment moves forward into open terrain, our ability to repel tank attack decreases as the chance of receiving such an attack increases. The infantry regiment may have a frontage of as little as 2400 yards when occupying broken, heavily wooded terrain. However, when occupying battle positions in flat, open terrain favorable for enemy armored assault, the regiment may be assigned a frontage of 10,000 yards. A tank company is incapable of providing antitank protection to an infantry regiment along such a frontage.

The limited tank strength available to defend a regimental sector doesn't allow armor to attack. Instead we surrender the initiative to the enemy and let him choose the time, place and strength of the assault. In tank warfare this is sometimes embarrassing to a defending force and usually fatal.

We will not always be fighting swarms of enemy tanks, nor will our actions be limited to platoon size raids. Our objective must be to organize the separate armor units organic to the infantry division so that they can be used as one powerful, cohesive force and still be flexible enough to detach small units

that can support infantry and conduct minor antitank missions.

This is not a radical departure in military organizations. Infantry squads become infantry divisions which in turn are organized into field armies. Tanks operating in support of infantry elements must be capable of combining in the same manner. The tanks in the infantry division should be organized in a tank regiment. At corps the tank regiments can combine to form a tank brigade which in turn would be part of a tank division at Army.

THE composition of the tank force organic to the field army should follow these general principles. The tank regiment would become the basic tactical unit to provide antitank protection for an infantry division. It would become the headquarters in which the technical, administrative and tactical matters were coordinated for the three battalions serving in direct support of the infantry regiments. It is at the infantry division level that competent armor advice is most desperately needed. During the planning phase of an action while the operational details are still under consideration, a tank regimental commander would be in a position to recommend the best way to use the available tanks. At corps the tank brigade headquarters would be a tactical group charged with the antitank defense of the corps sector. The tank brigade commander would have the three tank regiments under his direct command. It is at this echelon of command that the advantages of such an organization become apparent. A corps commander would have at his disposal three regiments of tanks which could be committed as one force under the command of his tank brigade commander. There are many situations in which such a force could be usefully employed. For instance in the case of a dangerous enemy armored threat along the boundary of two divisions, it is likely that the two tank regiments serving in direct support of these units would be committed to meet the attack. It is conceivable that should one of the three infantry divisions be in reserve at such a time the tank regiment normally used to support this unit would also be committed to reinforce the strength of the front-line tank regiments. This is the type operation that is now precluded by the present organization.

At Army a major general, serving as tank division commander, would be responsible for the antitank protection of the Army front.

It is not likely that all tanks organic

to a field army would be committed as one force. The point is that they could be if it became necessary. The tank division headquarters would serve principally in a planning, administrative and supervisory capacity. In times of peace such an organization would provide a method of training armor officers in the command of large tank formations.

WHERE does all this leave the embattled infantry commander? Must he be content with sending frantic requests through channels for the support of a tank platoon while his outposts are being driven in? Then, if by chance, a tank platoon should arrive, must he engage a sullen, defiant armor commander in tactical debate while his regiment is being eaten up by enemy tanks? This is the frightening specter that haunts the infantry commander. He feels that a tank company at hand, regardless of how ill trained or clumsily employed, is better than three tank regiments at corps.

But I believe the infantry regimental commander would profit most by this proposed reorganization. Ordinarily, he will have a tank battalion in direct support of his regiment. He will be assured of competent advice and effective support. The problems of training, employment, and supply of organic tanks would be eliminated. This additional equipment would also permit limited objective attacks by mounted infantry.

The number of tanks available for the close support of the infantry regiment would be increased. The tanker would be more proficient because he would get concentrated training under highly specialized armor instructors. In addition to more effective close support of the infantry, he would be organized and trained to wage mobile tank warfare. To restrict tanks to a defensive role against a mobile, aggressive enemy is tragic. Our infantry troops as well as our tanks would surely be destroyed.

A new period of tank-infantry cooperation would result, with a true spirit of cooperation based on mutual respect and confidence; not, as at present, on the enforced subordination of armor.

Would the infantryman have no recourse but to accept the decisions of his supporting armor commander on questions of tank employment? He would always have the normal channels through which to challenge the tanker.

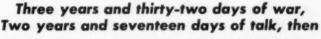
Like the infantry, armor decorates a commander if he is brave. If he is incompetent we relieve him. If he is cowardly we court-martial him.

Armor will not betray its trust. We will fight because we, too, are soldiers.



Infantrymen move out of fortified positions and back to new positions that must be fortified and manned for no one knows how long.

Stripped to his unzippered armored vest a combat man totes a box of ammunition rearward.



TRUCE COMES IN KOREA



WONSAN
WO

The white area between the two black lines is the two and one-half-mile wide demilitarized zone behind which opposing armies withdrew under terms of the armistice agreement. The demarcation line, in the center of the demilitarized zone, was based on battle positions when the truce agreement was reached.

WHEN JOSEPH "GOT IT" FROM THE NEW KING

LIEUTENANT COLONEL E. N. KIRSTEN

The pattern of military management goes clear back to the Book of Exodus

AM fond of the Book of Exodus. For one thing it contains the moment in history that I am most sorry to have missed. I would give much to have seen the expression on Pharaoh's face when his daughter presented him with the baby Moses and said "Believe it or not. Daddy. I found him in the bulrushes.

Mostly though, I like the book of Exodus because one short verse in it is the complete story of one of the more unpleasant, but all-too-frequent episodes in the life of a military man. "Now, there arose a new king over Egypt, who knew not Joseph.'

Leadership is fine and essential and the Army very properly spends a great deal of time and effort in teaching young officers the principles and patterns of leadership. Sooner or later, however, the officer is confronted with the situation where military leadership merges into military management; where "Follow me, men" or "Any questions? Move out" are no longer appropriate. Unfortunately, there is little specific advice on how to be a military manager and so many an officer who was a good leader of men has to learn some new techniques the hard way.

Military management is the management of activities of the Army which do not deal directly with combat. Or stated in reverse, it is management by the Army of activities which, though part of the military establishment, have civilian counterparts. Thus military management differs from straight high-echelon military command on the one hand, and normal executive management as it is found in business and industry on the

Being neither completely military nor

completely civilian, military management is usually encountered in the area of overlap between these two spheres of activity. It is found in the technical services, for example, in the manufacturing arsenals, laboratories, and the procurement offices, even in their field operations. It is found in higher echelon G4 sections, where the exploitation of the resources of either the zone of interior, the communication zone, or even army rear, requires military supervision of civilian activities. It is found in most aspects of military government.

Management of the activity is not an end in itself. It is an adjunct to a strictly military operation some place else. The manager is not a sun, but a satellite. This means that the aims, methods, and values of management must be interpreted in terms of the military mission assigned instead of the normal commer-

cial terms of profit and loss.

WHAT are some of these patterns of military management? Let us go back to Exodus, eighth verse of the first chapter: "Now there arose a new king over Egypt, who knew not Joseph.'

Just picture the situation. Egypt had just been through seven years of famine, precisely as Joseph had predicted. By careful management Joseph's organization had managed to weather the storm and though the fields were stripped, the herds gone, and the population reduced almost to slavery, Joe considered himself a successful man. He had anticipated the problem, worked out the solution, made himself top dog. And now had quite a local reputation as a supply man. He probably had considerable plans for reconstruction of the country, too.

In stamps the new CO. I don't know where he had been during the famine, but apparently not in Egypt. He takes one look at the stripped fields, the decimated herds and the ragged people, and screams, "Who in the hell is G4 of this outfit?" Everybody points to Joe. Joe snaps to attention, ready to give his class-A spiel and take the new CO on the five-dollar tour. The new CO has one comment.

"You've had it! Scram!"

Can't you just hear Joe trying to bleat, "But sir . . . !"

"Scram!"

"May I make a statement?"

"No! Any man who would let a country get into this condition . . ."

Actually this didn't happen. Joseph was dead when the new king "rose up." However, that doesn't affect the moral and from it we can deduce our first rule of management. In an unsatisfactory situation, don't blame the personnel until you are sure of the circumstances. The Navy has a saying, which, now that we are integrated, I presume it is permissible to use. "The new Officer of the Deck shall not change sail for one bell." In other words, as the new Officer of the Deck takes over his watch he is supposed to assume that the previous Officer of the Deck had good reason for having set any particular sail and the new one must wait one bell, or half an hour, to be sure that he understands the circumstances sufficiently before he changes the instructions of the previous Officer of the Deck.

There is no wiser rule in management. Often a CO, being dissatisfied with a given situation, will fire officer A and install officer B in charge of the operation. In doing so, however, he gives officer B instructions, additional means and sufficient power and authority to get the job done. Officer A could have done it too had he been so supported. You are in far less danger of having the operation go completely to pot with someone familiar with the problem than risking the dangerous enthusiasm of a newcomer who comes to the job aware that the operation has been unsatisfactory and therefore has a tendency to make changes entirely for the sake of making changes without adequate knowledge or evaluation. Be sure that it is the people who are unsatisfactory before you make a sweeping change.

N taking over an existing organization it is quite normal to take over an old fight. When you do, the important thing to remember is that loyalty to your new organization must start at full torque. You walk into your new office and in comes the CO of the organization who has been feuding with your prede-

You are forced to sit down and listen to a series of complaints concerning operations about which you know nothing,

LIEUTENANT COLONEL E. N. KIRSTEN, Ordnance Corps, is now on duty at Aberdeen Proving Ground, Maryland, after a tour at The AA&GM School, Fort Bliss, Texas. He is a graduate of the Military Academy, Class of 1937 and was first commissioned in Field Artillery. He transferred to Ordnance Corps in 1947. in which errors whose significance is unknown to you have been made by a lot of stupid people-all of them yours. The first thing you do is call in your subordinates for assistance. Right here is the crucial point. Make it clear to the other commander in the presence of your people that you think maybe there is some foundation to his argument but that you are sure you have not yet heard the whole story; that you feel you have a number of perfectly competent people working for you; that if there is anything wrong you will find it out but if, as you suspect, the situation turns out that his organization is as much at fault as your new organization, he will get cooperation but not surrender. The line of opposition must be drawn between you and the opposing organization, not between you and your subordinates. Don't sell your own organization short, and don't promise your shirt to the opposition until you are sure he is entitled to it.

It may happen, however, that your assignment in military management calls for you to create a new organization, good old point number one of the "estimate of the situation" is still the starting point: "What is my mission?" Obviously you can't organize to meet a problem if you don't know what the problem is. Having determined your mission and organized to meet it, the next most important action is the delegation of authority. There are a couple of appropriate verses in the eighteenth chapter of Exodus:

"And Moses chose able men out of all Israel, and made heads over people, rulers of thousands, rulers of hundreds, rulers of fifties, and rulers of tens.

"And they judged the people at all seasons: The hard causes they brought unto Moses, but every small matter they judged themselves."

In delegating authority, be sure you do so completely and honestly. Don't assign a subordinate section a mission, then establish in your own office a section of approximately the same size to "supervise" the operation of the subordinate section. In other words, delegate authority, don't merely establish additional supervisory layers.

There is one characteristic of establishments under military management, however, which merits a word of caution about delegation of authority. Such establishments are chronically overloaded with work and sooner or later, the addition of one more project on the top means that something has to drop off the bottom. The responsibility which

you have no right to delegate is that of determining which project shall be dropped. The natural tendency, because it is the easiest for a commander, is to just keep piling on the projects and then use "delegation of authority" as an excuse for making the subordinate choose -and hold the bag for-the activities he will pursue or suspend. The military tradition that you don't tell a subordinate "how" to do a job is very fine-and especially convenient when the job is impossible. But if your subordinate is asking you what you want done, that comes under definition of the objective and is your business. It is both odd and distressing, but no matter how crisply you issue the command, nor how promptly you relieve the subordinate, a onequart pail won't hold three pints and a sixty-cycle induction motor won't even try to run faster than its rated speed.

N delegating authority, an administrative pattern sometimes develops which will call for considerable tact on your part. It happens when you have a strong, aggressive commander in charge of a minor operation reporting to a major operation. It might be when you are chief of staff dealing with a theater commander or when you are a company commander dealing with a leader of a detached platoon. It comes up this way. The subordinate commander can spend all his time on two or three projects and wants you to spend all your time on those same two or three projects, without realizing that those two or three projects which are important to him are only a small part of your operation. It



is very right and proper of the subordinate commander to take his problem scriously. It is very wrong and improper for you to permit him to monopolize your time, which should be spent on your entire job.

The secret is to avoid personal correspondence on official matters with the subordinate commander. The best way of indicating your interest in his problems is adequate instructions and prompt and effective official action on his official requests. If you let the situation develop in personal letters between you and the

commander you will soon find yourself spending more time on his problems than your job will permit, but with no way of getting out of that situation without antagonizing the other commander.

If personal correspondence is to be limited, technical correspondence is to be encouraged, in order to keep the command channel from becoming cluttered up. The crucial point here revolves around what appears to be a minor problem, the simple administrative matter of routing the action papers in a headquarters. The ideal in any headquarters is to have a single person of sufficient background, seniority and authority to know the full problem, see, route, and follow up all action correspondence. As soon as the command channel is so cluttered up with technical "information" correspondence that it becomes necessary to reduce the routing to a mere clerical operation or to establish several echelons of routing, your administration begins to suffer. Obviously there must be continuous screening of important from unimportant papers in the various echelons of the headquarters up to the few policy papers which are seen by the commander himself. However, if you can start that screening process by separating the command papers from the technical papers before they even get into your headquarters, a considerable step has already been taken.

General J. L. Holman, under whom I served several instructive years in the Pacific during World War II, used to say there are three ways a man can get crossed up. First is by the enemy. This is bad but sometimes excusable since the enemy is spending all his time and efforts trying to do just that and he is bound to be successful occasionally. Another way is by your own troops. This is inexcusable and is direct and conclusive evidence of your unfitness for command. The third way is by the Old Man and there is nothing you can do about it. This appears to be an exclusively military statement of the situation, but if you will substitute the ideas of "problem" or "situation" for "enemy," and "subordinate activities" or "people" for "troops" where appropriate it will apply to military management.

You have noted that I chose to write about how to manage. I would hate to have to discuss the theory of being managed. For example, I don't know just what Joe should have said or what attitude he could have assumed that would have helped when the new king came screaming for the G4. But that is another story.

AND THE

And they shall march every one on his ways, and they shall not break ranks. — Joel 2:7

BRIGADIER GENERAL EDWIN H. RANDLE

THE command-car moved cautiously through the traffic of lumbering carts, jaywalking Arabs, and girls on bicycles with attractive lengths of leg showing. There must have been some men and boys on bicycles, too, but the Colonel and his driver and orderly saw only the girls. They had not seen any for two months. And all the girls riding bicycles in Casablanca that day seemed very pretty, indeed.

"Hancock," the Colonel said, "keep your eyes on all the traffic. The Arabs,

Hancock made no reply but drove the awkward vehicle a little more carefully than usual. He was a Florida country boy and no conversationalist. But he could find his way over strange roads in blackouts without the Colonel having to watch every turn.

"The French are very proud of this town," the Colonel said. "They developed it from a little Arab village."

"It's sure different from Newark," Cull said.

Hancock stopped to ask directions of an American soldier and the commandcar moved on again.

"Colonel, sir," Cull said, "we took Safi three weeks ago. How long are we going to stay there?"

"That's what I've come up here to find out. Since November 8th, when the 47th Combat Team landed in the dark and captured Safi, I've heard from General Patton exactly three times. But he has been pretty busy. It's a sort of a compliment, too, not bothering about us."

"We did pretty good, didn't we, Colonel?" Cull, like the whole Combat Team, was intensely proud of his outfit.

"Better than pretty good. And don't let anyone ever tell you we had no opposition, either. Our fifteen dead and fifty wounded weren't casualties because we fired on ourselves."

Busting illusions, the Colonel thought, is not my trade. To these boys the Safi operation was the biggest adventure in their lives. But very little of it will ever get written up in the history books. It was a side show. And the Combat Team and the Navy operated so smoothly, it looked easy in the reports. Guess I should have messed it up a little to make it look desperate.

Just then Hancock pulled up in front of the Shell Oil Building, General Patton's headquarters. The Colonel got out and stretched. He went up in the elevator and found the G3, who said, after the usual preliminaries, "Your division will concentrate at Port Lyautey, about eighty-five miles north of here. You are to move your Combat Team—less one battalion—by rail. Figure how many trains you need and let me know."

"You haven't enough locomotives to haul my outfit, without slowing supply hauling." The Colonel paused to let that sink in. "Let me march it. Division Headquarters and a lot of odds and ends have to come over from the States. It will be wonderful training in march techniques."

The G3 had to put it up to the General. In a few minutes he returned with a grin. "The General says you can march. You can start when you are ready, and take any route you want. Just let us know where you are every day."

After a little haggling over 2½-ton trucks and ambulances, the Colonel hurried down the stairs, not waiting for the elevator, jumped into the back seat of

the command-car and said, "Let's roll."

Hancock drove back through the city with more assurance. Cull, beside him, was quiet, too, enjoying the sights and thinking of Newark and girls, all at the same time.

STRANGE, the Colonel thought, nobody questions the time-tested twoand-one-half miles an hour marching rate for infantry until a war comes along. Then some cavalry or field artillery joker gets command of an infantry division and wants to improve on Nature. The idea, someone should explain, is to get the troops to their destination in shape to fight when they get there.

"Cull, did you bring along anything

to eat?" the Colonel asked.

"Yes sir. I put some K-rations in the back."

"Well, let's pull up in the shade of that eucalyptus tree and eat."

The K-rations with their tasteless biscuits and potted meat stopped that gnawing in the stomach, but contributed no pleasure in doing it.

I've been a doughboy, the Colonel thought, for about twenty-six years-a captain for sixteen of them-and marched all over France to get to fight in World War I, and then all over Texas and Arizona for years. Not riding horses, either. Always a footslogger commanding rifle companies. A man can swing along mile after mile at 88 yards, or 106 thirty-inch steps a minute, provided he gets his full rest periods. He'll end up tired, of course, but in good shape and able to fight if he must. But step the rate up to three miles an hour, or more, and his endurance comes down disproportionately fast. He thought of the general who, on a twenty-mile hike, ordered the infantry to march three-and-one-half miles an hour under a blazing sun. From the second halt on, men were dropping out right and left. The small percentage that reached the bivouac in formation were completely exhausted.

"If one of my battalion commanders

Brigadier General Edwin H. Randle, retired, commanded the 47th Infantry Combat Team in North Africa, and later served in the Pacific theater. This is his second appearance in these columns in recent months, the earlier one being a penetrating analysis of the need for more training of small units as teams.

MARCHED, EVERY ONE

ran a march like that I'd reclassify him just as sure as hell," the Colonel muttered.

"Sir?" said Cull.

"Nothing, Cull. Were you on that march the regiment made when Sergeant Ellis and his pioneer section built a log footbridge over the creek?"

"You mean, sir, the one where we marched fifteen miles, rested in the pine woods for three hours, and came on in in two downs?"

"Yes. How did you feel when you got in?"

"Well, sir, there's no use kidding anybody. I was tired, but I wasn't all in. With a little rest I could have done another two downs, if I'd had to." I ran that march, the Colonel thought, exactly as prescribed in the march graph in the Staff Officers' Notebook for a twenty-mile march. And the regiment got in without a single man falling out. A lot of officers haven't learned yet what has been in FSR for years: a forced march is not going faster, but marching longer hours. The young male machine has a good motor, but also has its limitations. You can overheat it and you can burn out the bearings. And by stupidly conducting marches you can breed an intense hatred for marching, and for the infantry which does it.

When they reached the gates of the command post it was dark. Two helmeted sentinels presented arms as the Colonel stepped down. Their heels and gun slings popped. The CP was in the El Marhaba Hotel. It was beautifully situated in a walled garden on a hill-side overlooking the tow of Safi, and the ocean. The Colonel passed through the wide doors and entered the circular Moorish lobby with its pillars and arches decorated with intricate designs in green and red and gold. He was met by his executive.

"Hello, Rumbaugh. As soon as I grab a bite I want to see Fred and Herman. And tomorrow at nine I want a meeting here of all the staff, battalion and special and attached unit commanders." The Colonel went down the steps to the dining room.



AT 0900 the next day the officers assembled in the little theater just off the lobby. As the Colonel came down the aisle all stood at attention. He was intensely proud of his Combat Team. He had joined the regiment as a battalion commander in 1940 and had had a major hand in developing these youngsters.

hand in developing these youngsters.

"Rest. Be seated." He thought of his first Colonel. An apoplectic old bastard who deeply resented being officered with "ninety-day wonders." The only advice he ever gave was, "You're confined to camp for three months," and "Did you ever hear of Army Regulations? Well, God damn it, go look it up." The only people we could approach for advice were the old noncoms who had been made lieutenants and captains. Not a one ever turned us down or hazed us.

"Gentlemen," the Colonel said, "our Combat Team—less the 2d Battalion—moves day after tomorrow, December 1st, by marching, to Port Lyautey where our division will concentrate." He paused. The only sounds were pencils writing and notebook leaves turning.

"The march order will be out this afternoon. Tomorrow morning, after you have studied the order, we will again assemble here. Save your questions until then. It is about 220 miles to Port Lyautey. We will make it in easy marches, about fifteen miles a day. Sundays we will rest. The rate of march will be the standard two-and-one-half miles an hour for foot troops and 25 for transportation.

SAFI
tion with pack howitzers towed by half-

Two-and-a-half miles an hour is 88 yards a minute, or 106 thirty-inch steps a minute.

"As you know, we landed here with a minimum of transportation. Western Task Force can give us only seventeen 2½-ton trucks with trailers, for kitchens and blanket-rolls. That means the artillery, which was equipped for this opera-

tion with pack howitzers towed by halfton trucks, will have to march on foot, as will the engineers and others. They will make it and take pride in it. Of that I am sure.

"Units will be rotated each day. Thus, every unit, regardless of branch, will get its turn leading its battalion, and the Combat Team. The road is blacktop but there are good dirt footpaths, made by the Arabs and their donkeys, on both sides of it. The formation will be column of twos with a file on the path on either side of the road. Keep the pavement clear for traffic.

"There will be a distance of 100 yards between battalions, 50 yards between companies, and 25 between platoons. Battalion commanders will, on the exact second, signal the hourly halts. Files will fall out on their respective sides of the road and stay there. That includes officers. Fall out marching and fall in marching. Troops must have every second of their rest periods for rest.

"There will be no more than seven men, besides the driver, on kitchen trucks: the mess sergeant, four cooks, and two KPs." The Colonel looked up from his notes. "Major Roberts, where will you place your ambulances?"

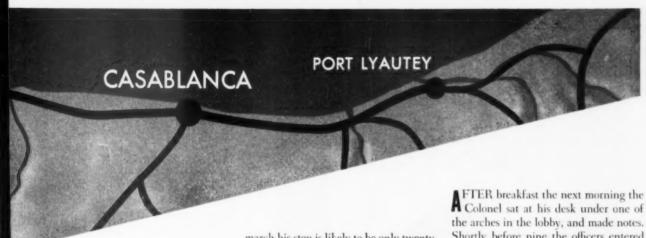
"Colonel, sir, I don't have any ambulances, except jeeps."

The Colonel grinned. "I saw six new ambulances swung over the side of a ship a couple of days ago. Liberate them."

"Yes, sir. Well, in that case I will put one ambulance in the rear of each battalion and keep the rest with me at the tail of the column."

"No. That creates too great a temp-





tation. Keep them all with you and have them move by bounds."

"Lieutenant Sawyer."

"Yes, sir."

"You and Lieutenant Speer, and two sergeants you will select, will be the Provost Guard. Do you know the duties of a Provost Guard?"

"Well, only vaguely, sir."

"The Provost Guard marches just behind the last unit in the column. If you see a man who has fallen out, ignore him."

"Ignore him, sir? I thought . . . "

"Yes, ignore him. The Surgeon will be right behind you. He will examine the soldier and decide whether he should ride or continue marching. If the latter, he will turn the man over to you. He will march with you the rest of the day.

"Now should the Surgeon find the man is sick, or for some other reason should not march, he will put him in one of his ambulances. Is that clear, Major?"

The Major nodded that it was.

"Each platoon," the Colonel continued, "will select a pace-setter. They should be men of average height who naturally take a thirty-inch step. Get them watches with second hands. The pace-setter will march in front of his unit, and alone. If a man marches alongside another he will engage in conversation and forget about the pace. Too, the natural inclination of men marching abreast is to conform to each other's length of step and cadence. But caution them that when tired, or going uphill, a man tends to shorten his step as well as slow it down. When going downhill the reverse is true. By continually checking his 106 steps with the second hand of his watch -or 53 in half a minute-the cadence can be maintained. But unless the pacesetter is alert, during the last part of the march his step is likely to be only twentyfive inches instead of thirty. Then you get the accordion action which is so exasperating; men bumping into those in front. The pace must be a uniform 106 thirty-inch steps to the minute uphill, downhill, and on the level.

"As for marching in step, that is optional with company commanders. Some think it makes marching easier. If the men think so then it very likely does. Try it and see. Now none of these ideas is new. Soldiers have been marching over the world for a great many centuries. That is all for now." The Colonel grinned and the serious expressions relaxed a little as the officers stood at attention.

Walking up the aisle, he thought, they call me *The Bear*. I guess I do growl a good deal, but I love them all. Even so, *The Bear* is a little more dignified than the nickname my Negro soldiers of A Company, 25th Infantry, gave me years ago. He smiled as he thought of it. *Aggravatin' Papa*. I loved them, too.

AFTER breakfast the next morning the Colonel sat at his desk under one of the arches in the lobby, and made notes. Shortly before nine the officers entered the little theater, and exactly on the hour he followed and took his place at the foot of the center aisle facing them. Large lithographs of Marshal Petain flanked the movie screen behind him. The Nazis, he thought, would have pulled them down and substituted Hitler. I wasn't issued pictures of FDR.

"Gentlemen, the march order lists the items of uniform to be worn. Among them are steel helmets and leggins. The light pack is prescribed. Raincoats are always part of the light pack. Two things look particularly sloppy: raincoats draped over the cartridge belt and dragging at a man's heels; and part of a unit wearing them and others not. Battalion commanders will decide when raincoats are to be worn, and removed. They will be worn by all, including officers, and likewise removed by all and placed in the pack or musette bag.

"Every officer and man will shave every day. You may think this a little overly nice. It is not. If we are a thousand miles from civilization, I will see you and you will see each other. We are going to look like the smart outfit of first-class troops we are. When a soldier begins to look like a bum, he begins to feel like one. And then it isn't very long until he begins to act like a bum. Your men will growl at some of these things, but watch when they see other troops. They will sneer at them for not doing the things they themselves growled about. That is soldier nature.

"Captain Schmidt."

"Yes, sir."

"Among your many duties as SI is billeting officer. This afternoon take a guide from each battalion and separate unit and select tomorrow's bivouac. There is plenty of space. I want large areas. Each platoon is to have an acre of ground and its own straddle trench. Each day, Captain, you and your guides will leave the bivouac first. Go to the





next one and guide in the transportation and foot troops when they arrive. Then, each afternoon, you with your guides will select the bivouac for the next day.

"The march order states there will be 100 yards distance between all vehicles on the road. They must never be bunched, not even when entering or leaving bivouac areas. Especially not then. Move them off the road and into the areas without stopping, losing distance or jumping the road. It can be done. Flow them in at as many points as possible. Transportation is divided into march units and sections. That will facilitate control.

"In bivouac no vehicle must be parked closer to any other than 50 yards. When parked, all must be headed out, that is, toward the highway. Then, should you have to get them out in a hurry they will not have to be turned around. When leaving the bivouac each morning the exits must not be jammed. Every driver must know his place in the column—the vehicle he is to follow—and not move until that vehicle has gained the required distance. To do this and not stretch out the column on the road, the

lead vehicle of each march-unit will keep to 15 miles an hour until all its vehicles are clear of the bivouac. It will then gradually increase speed to 25 miles an hour.

"You have noted that the foot column moves out first each day. The transportation column is timed to pass the foot troops during the first rest period. There are other ways the two could be coordinated but this, I think, will be most advantageous for all of us. The IP and the times the columns reach it will be announced each afternoon by the S3.

"Colonel Rumbaugh, each day when the transportation has cleared, you and the Surgeon will make a sanitary inspection and later report to me the police of areas, latrines, and sumps. That completed, Colonel Rumbaugh will move to the new bivouac and organize it. The Surgeon will take his post at the tail of the foot column.

"Captain Murphy. We will base on Safi until halfway to Casablanca, and thereafter on that city. Maintain march discipline and 100 yards between vehicles in your supply convoy.

"Now, let's have the questions." There

were surprisingly few and the meeting was soon ended.

ARLY the next morning, December 1, 1942, the Colonel's command-car approached the IP a few minutes before the head of the first unit reached it. The weather was clear and cool. The sun promised increased warmth later. Gathered there was a little group come to say an revoir. When he had shaken hands all around, the Colonel said: "I'm changing to the jeep, Cull. Remain and check the timing at the IP. When the transportation has cleared, go to the new bivouac and help Rumbaugh."

The Colonel, with his jeep driver, pulled ahead to the top of the cliffs. A little beyond they turned off on the side of the road and waited. As the foot column neared he dismounted and stood just off the road. He watched the entire column pass. The climb up the winding road was strenuous, but the pace was good and spirits were high. A change always boosts morale, he thought.

Day after day during the entire march the Colonel followed the same routine; precede the troops half a mile, pull off to the side and, as the column approached, dismount and stand until its tail had passed. Then his jeep would move between the files to a new post and again he would review the column. It was not that they needed constant supervision. He had a deep-rooted feeling that his place was with the troops all the time.

Sometimes it was amusing. As men caught sight of him they would straighten up a little, cover-off better, or in a jump quickly regain a few inches distance they had somehow lost. Some would pretend not to see him and go marching past with head and eyes to the front. Some, engaged in soldier talk, did not see him. A few would turn their heads and grin. One, he found himself watching for. He was short. Thirty inches was long for him but he had learned to roll his hips with each step to keep up. His helmet was too big and always over on his left ear. Each time he passed he looked up with an infectious grin. He was not trying to attract attention or bootlick. He was just a likable kid being natural.

The Colonel was the last one in, each day. When the Provost Guard and the Surgeon had cleared, Cull was there to guide him to his tent. His steel helmet came off first. But as long as he made the men wear helmets, he wore his. The first day when Rumbaugh came up he said, "I don't like the kitchens."

The kitchen crews had taken the easy

way and had prepared dinner on the trucks.

"Hereafter have the field ranges unloaded, kitchen flies pitched, kitchen trucks lined up alongside, supplies stacked uniformly, and company and battery guidons displayed. You decide the arrangement, but make it uniform. The men are hungry, and when at last they near the bivouac they want to see well organized kitchens that look capable of turning out a good meal. Also, units are too bunched. We must get them used to spreading out, in bivouac as well as in combat."

THE third morning the Colonel waited to watch the tank company and the transportation move out. They did it very well. But he saw one kitchen truck with too many men on it. "Those of you who are not cooks or KPs, dismount and line up." Nine men slid to the ground with the appearance of patient suffering.

"Why were you on the truck?" he asked the first.

"Sir, I've got a terribly sore foot. I can't make it today."

"And you?"

"Colonel, sir, I had cramps all night. I'm too weak to march."

Each had an excellent reason for waiting and climbing on the kitchen truck at the last minute. The Surgeon joined the group. He had the faculty for showing up when he was wanted.

"Major Roberts, these men say they can't march today. If they are not in condition to march they ride in your ambulances, not kitchen trucks."

That afternoon at dinner the Colonel asked, "Roberts, how are those nine men from K Company?"

"Colonel, sir, they are all right. They made the march."

"All of them?"

"Yes, sir, every one. There wasn't a thing the matter with any of them."

After the first few days word got around that between the Surgeon and the Provost Guard it was useless to try to put something over. A man might as well march with his own company. Thereafter when the Colonel saw a man beside the road, which was very rare, he felt confident that the soldier really needed attention.

It became a pleasure to watch the transportation column move into a bivouac area. There was no jamming on the road as guides met their sections and march-units and got them off the highway, headed out and parked. Everyone knew his job and proceeded to do it. It was like a circus coming to town. Things got done well, and quickly, and quietly.

It was on Friday that the Combat Team bivouacked on the outskirts of Casablanca. It stayed over and paraded in the city with French troops Sunday afternoon; troops, transportation, guns, tanks and all. Before daylight Monday morning it started on the last eighty-five miles of its march. At the second down a messenger handed the Colonel a letter from General Keyes. It was a commenda-

tion for the Combat Team for its appearance and marching in the parade, and for the conduct of its officers and men during the three days they had been given passes to the city.

On December 19 the troops marched through Port Lyautey to a bivouac area in a cork forest a few miles north. Discipline and morale had been superior. The field artillery, engineers and other attached units had taken their turns leading the infantry. They would have much preferred to ride, of course, but they marched, every one. And they did not feel sorry for themselves. Quite the reverse. The entire Combat Team was very cocky and looked down on all other troops as sloppy, undisciplined pantywaists. "Gangplank soldiers," they called them.

Envoi

N February, 1943, the 47th Combat Team, by a combination of marching and shuttling, covered the 175 miles between Oran and Arba south of Algiers. It made 30 miles a day. From Arba to Tunisia it moved by motor about 775 miles and participated in the actions at El Guettar and the Sedjenane Valley. As the African campaign closed it captured Bizerte. Three days later it left by motor for Mascara, Algeria; covering the 950 miles in five days.

The Colonel will always wonder what became of the lad with the outsize helmet, the rolling gait, and the likable grin. He never saw him again.



COUNTERING COMMUNIST ARTILLERY

MAJOR MARK M. BOATNER III



Early World War II version of a Soviet mortar. The Reds are firm believers in mortars and have many of much larger caliber than this 82mm job.

MANY of the things we "learned" in Korea have been known since the beginning of warfare: that you shouldn't expose yourself on the skyline, that you should always have all-around security, that the junior officers and noncoms need more training, and so on endlessly until the non-thinkers tell you that there is really nothing to be learned from Korea because it was not a "real war."

But there is something very significant we have encountered in Korea. It's the Soviet concept of artillery employment as practiced by their disciples, the Chinese and the North Koreans.

How does Soviet artillery ("artillery" in the sense we will discuss it here includes mortars, tanks and rockets) doctrine differ from our own? The basic and most significant difference is that the Russians, and hence, those of their Red satellites we fought in Korea, do not consider artillery to be a supporting arm exclusively. They maintain that their artillery can be massed in sufficient quantity to give it the capability of capturing and holding ground!

This is entirely foreign to our own ideas. But the Russians evidently feel that their World War II experiences bear out the correctness of their doctrine.

For the moment let's not get into a big hassle as to the relative merits of the two conflicting doctrines. Instead let's look at the Soviet doctrine as practiced in Korea.

In Korea our troops have encountered enemy artillery fires of an intensity few veterans of World War II ever experienced. It is a forewarning of what we undoubtedly will encounter on a far greater scale in World War III.

There have already been instances in Korea of American troops being driven out of defensive positions by fire power alone. American troops in Korea have had counterattacks stopped short of their objectives and driven back by fire power alone. We should not lose the real significance of these facts by resorting to such clichés as "They didn't have the guts to stay or to go back"; or "The planning was no good." It's not that simple.

Let's be sensible enough to recognize a different doctrine when we get hit over the head with it, even if it runs counter to what we have been teaching in our own service schools.

What have we done in Korea to counteract the tremendous volume of fire laid down by the Reds? For one thing we have given them a taste of massed artillery fires, American style. But we should not forget that we are firing ammunition in Korea at a rate which we would probably not be able to afford in a large-scale war. The ratio of artillery tubes to infantry units is higher in Korea than we can expect to have in a large-scale war.

In Korea we have also relearned much about field fortifications. Certainly a large part of the answer to the threat of Soviet massed artillery lies in proper overhead cover and strong bunkers for key automatic weapons and observation posts. We have much to learn about this business of trench warfare and

the construction of proper bunkers. But that's another story.

N searching for an answer to the challenge presented by this different use of artillery, wouldn't it be smart to take a look at how the Russian himself believes in setting up and conducting a defensive operation?

His idea of how to defend a given piece of terrain differs from ours in two respects. First, he digs a hell of a lot deeper than we do. A Communist defensive position in Korea is organized like a prairie dog colony. Most of the defenders are well underground and a few lookouts remain on the surface in covered positions to weather the artillery preparations and to signal for the rest to come running up from their deep shelters in time to meet the advancing enemy infantry.

But the most significant difference is that every unit in a Russian defensive setup is not required to hold his position "at all costs." They organize much as we do with "two up and one back." But if things get too hot for one platoon it is not required to stay in position and be destroyed by fire; on the order of the company commander it can drop back and set up in the company strongpoint. Presumably, a company or battalion that seems to be in a position where it is being destroyed by fire can be ordered back to the battalion or regimental strongpoint. The communists concede that guts and tenacity are not always a match for massed artillery.

So far I have deliberately avoided the question of who is "right" in this matter of artillery doctrine. Taking the long range point of view, we can say with

MAJOR MARK M. BOATNER III, Infantry, an occasional contributor to these columns, is now on duty in AFFE. He is a 1943 graduate of the Military Academy. considerable justification that the American system is superior to the Russian. Ours is more flexible. It is, quite properly, based on our technological and industrial superiority over the Communists. It has many other advantages.

The Russians contemplate massing many artillery units opposite a section of our lines where they intend to make a breakthrough-moving new artillery units in from other sections of the front in order to build up an overwhelming advantage. These huge concentrations of artillery take a long time to build up and are excellent targets for our air and our artillery. Our intelligence should learn about them in time for us to lower the boom on them.

But if war with Russia should start next week will we be any more prepared for it as a result of our lessons in Korea? Or will we march into battle chanting "our doctrine is fundamentally sound," set up a standard forward slope defense, tell all units to hold every position at all costs and just dare the enemy to prove he can blast a hole through our lines with fire power alone?

OT being from Missouri, I would not like to wait until the opening phases of World War III to be shown that he can do it. I have seen enough in Korea to be convinced that we have been given a preview of a technique that can hurt us badly unless we are

prepared to combat it with better techniques of our own.

The threat does not call for any revolutionary changes in our doctrine. But it does call for a little thought and some shifting of emphasis on our part. It is a matter for concern to infantrymen, artillerymen and combat engi-

The infantryman must recognize the merits of the enemy's strongpoint system of defense. We must have more flexibility. This will require well disciplined troops and will put a greater burden of leadership on the shoulders of all commanders. "Hold at all costs" is a simple order to issue and is a simple one for a brave man to obey, but much more judgment, initiative and better communications are required of a commander who is given the prerogative of withdrawing certain of his units, if he feels he can strengthen his position by so doing.

The infantryman must look for opportunities to set up his defenses on the reverse slope to minimize the damage that will be done when the enemy moves his tanks, SPs and recoilless rifles well forward in the opening rounds of the attack. He must study Communist methods of digging in a defensive position. He must master the fundamentals of field engineering: how to build bunkers that will not collapse of their own weight, trenches that drain properly, communications trenches that will take his men from one part of the position to another safely. He must learn how to dig in his telephone wires so that lines won't go out during the artillery barrage.

The artilleryman must learn how to put in OPs that won't be knocked out the first time some direct fire weapon wants to take the trouble to try. Rather than one large OP built on the geographical crest of the highest point of the sector (just where the enemy expects it to be) several OPs to cover any given area should be built. The artilleryman must become clever at putting OPs in places where the enemy can't pick them up the day they are built. To do this he must sacrifice some comfort and not expect to get 180 degrees of observation from every OP.

The artilleryman must be prepared to fire defensive barrages fast and close. Time and again Communist troops in Korea have overrun UN positions before friendly defensive fires could be called for. Attacking Chinese and North Korean assault troops do not follow their preparatory fires closely: they advance in their own fires! You can

count on that!

The artilleryman has also got to hit enemy mortars.

THE engineer must become more of a pioneer and sapper. Our engineers are magnificent when it comes to building roads and bridges. But when it comes to pioneer work-building key OPs in forward positions, using field expedients to move dozers and power equipment into forward positions to speed up the construction of large troop shelters, the digging of deep trenches in rock and hard soil, the expediting of armor well forward-they have something to learn.

The separation of duties under the headings of infantry, artillery and engineers is, of course, highly academic. During the conduct of a well integrated and coordinated defense the infantryman is also an engineer and often an artilleryman. The engineer is an infantryman also and may adjust artillery fires. The artilleryman must be an engineer and an infantryman. All must

work closely together.

Some wit once observed that you don't have to eat a whole hog to know what pork tastes like. In Korea we've been given a taste of "Soviet artillery." We should not have to wait until we are confronted with the whole hog before we finally recognize what it is and know what to do about it.

A medical aid station bunker in the 32d Infantry's sector of Korea. The nature of the Korean conflict has led us to "relearn" a great deal about field fortifications.



SEPTEMBER, 1953



Colonel George C. Reinhardt and Lieutenant Colonel W. R. Kintner

ATTACK: Is Fire Power Now King?

THE classic concept of fire and movement for seeking a tactical decision on the battlefield began with the revolutionary armies of the French Republic, flowered under Napoleon, and has been unchallenged since its exposition by the German tactician, von Clausewitz. Invariably the shock effect obtainable by maneuver has dictated all schemes for battle. The fire plan was devised to support the movement, to which it was subordinated; hence the common phrases "base of fire," "support fires," and the like

But now the tremendous concentration of firepower in a single package, brought about by atomic weapons, suggests that a new look be taken at the classic concept. In numerous situations maneuver will still determine the operations plan, which atomic firepower will crown with success. Yet cases may arise in which the unusual potency of that firepower will dictate the adoption of a particular maneuver. A frontal assault, always tempting as the most direct route to the enemy's vitals, but cast aside as a bloody insanity with conventional weapons, may now become the cheapest route with atomic weapons opening the way. Instead of searching out his weakest point for assault, the army equipped with atomic missiles may deliberately strike at the foe's strongest force. When it is destroyed exploiting columns of armor and infantry can do the rest.

OR the present an attack with atomic weapons presents all the difficulties that are inherent in any new and untried instrument of warfare. For one thing, much essential factual data are still in-

COLONEL GEORGE C. REINHARDT, Corps of Engineers, was an early student of the effects of atomic weapons on the ground battlefield. He is a graduate of Massachusetts Institute of Technology and has been in the Army since 1924. He is now on duty at Fort Belvoir, Virginia. Lieutenant Colonel William R. Kintner, Infantry, collaborates with Colonel Reinhardt in his writing and has also written extensively on his own account. He is a graduate of the Military Academy and earned his Master's degree at Georgetown University. He is now on duty in Korea.

This article is arranged and condensed from Atomic Weapons in Land Combat, published this month by The Military Service Publishing Co. Copyright, 1953, by The Military Service Publishing Company, Harrisburg, Pa. \$3.95. The frontal attack may become the cheapest way (in lives and treasure) to defeat the enemy

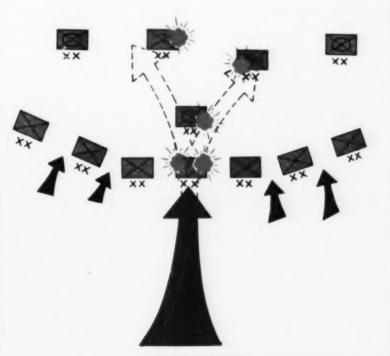
complete, and in some instances is contradictory. For another, the psychological reactions to mass destruction by atomic weapons are entirely unpredictable. Conceivably they could be more catastrophic than the physical damage. Panic and mental confusion have won perhaps as many battles as have bullets.

It can be reasonably assumed that in the near future all our soldiers will have acquired a sound, unexaggerated view of the threat of atomic weapons.

THE tasks assigned to atomic weapons in the scheme of maneuver will be primarily those which cannot be performed effectively by conventional weapons.

Both the limited number of atomic missiles and the principle of economy of force make sound target selection a problem of vital importance. It is probable, therefore, that authority to select the target will not be delegated lower than the level of the corps commander if, indeed, it is not retained by the army commander. The decision may depend upon the number of missiles available in the theater and the degree of control that it is practicable for army group and army to maintain over corps operations.

When aircraft are used to deliver atomic missiles, targets probably will be finally determined and missions ordered at army level where coordination is effected with tactical aviation. However, target location and identification by divisional reconnaissance will often be a fruitful source of intelligence, particularly for targets of a transitory nature. Divisional agencies, such as patrols and prompt, effective POW interrogation, may indicate transitory targets which would otherwise escape corps or army headquarters. Tactical and reconnaissance aviation will be another important source of this kind of information. Targets which by their nature can be located through map study or aerial photography -such as defiles, fortified localities, com-



BREAKTHROUGH

Concentrations of enemy barring our advance may become the best target for attack by atomic weapons—followed by exploitation by forces of combined arms.

munications junctions—will probably be corps or army responsibilities. But because there are transitory targets it is vitally important that all reconnaissance and intelligence elements of the division be educated to recognize potential atomic targets.

The ultimate selection of targets for atomic weapons must remain the responsibility of the commanders designated by the theater commander to authorize

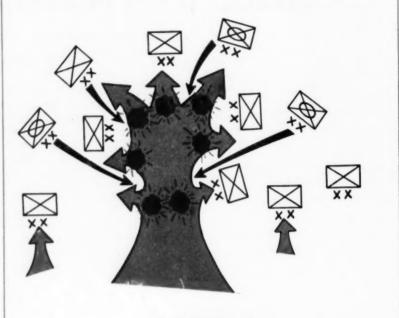
the use of such weapons.

With information about the enemy in hand, the process of choosing begins. In a particular situation, the atomic staff adviser must consider all possibilities.

After weighing the pros and cons he may recommend-with apologies to an ungrammatical but effective cavalry leader-"hitting the mostest with the most-est," rather than hitting the enemy where he is thinnest. The capabilities of the new weapon quickly confirm the wisdom of this recommendation. What may appear, at first glance, as a violation of accepted principles is actually a careful application of those principles. If the enemy either inadvertently or by enforced reaction to our maneuver risks a large number of men and equipment in a relatively small area, the casualties and destruction an atomic attack might inflict could be sufficient to throw the survivors into a state of demoralization, making them easy victims to swift, exploiting armored columns. The remaining enemy concentrations could be dealt with by conventional means. The principles of war-economy of force, surprise, objective (whether it be destruction of the enemy's will to fight, or the less likely but often discussed destruction of the enemy)-have all been ably served.

Of course, in another situation the choice might go the other way. Normally, preliminary planning for both the commander's existing scheme of maneuver and for the modifications introduced by the use of atomic weapons should progress simultaneously, until time and the general course of events narrow the field. It is at this point that division staffs are most likely to be involved. Then any on-the-spot information which a division can add to the higher echelon's knowledge of battlefield conditions becomes important.

DESPITE certain similarities in firepower, it is wrong to consider the use of tactical atomic weapons as artillery, although in broad aspect both preparatory and counterbattery fires may be performed by atomic weapons. But atomic weapons will likely be too limited in sup-



COUNTERATTACK

A hostile penetration is ...it by atomic weapons that destroy its prongs and the reserves entering the salient. Defensive forces then exploit the strike.

ply and too valuable for expenditure on area targets or blanket interdiction. Except in instances of emergency, and then only when authorized by proper authority, atomic missiles should be delivered against well-located targets of reasonably

well-known composition.

While units capable of delivering atomic weapons will seldom be assigned to divisions or receive fire missions from division commanders, limitations of range may make it necessary for them to occupy positions within the rear limits of the division area. In order to be prepared for this eventuality, division commanders and their staffs must be familiar with the procedures and techniques of their security, including deception measures to conceal firing positions. Divisions must be familiar with the transportation problems of atomic weapons and missiles. Obviously, they must also be completely informed on the time and nature of all fire missions ordered by higher authority, since these may affect the security of the divisional area.

WHEN atomic artillery, guided missiles, and free rockets become available to the field forces, there will be artillery battalions and firing batteries equipped with the new weapons and organized in many respects like conventional artillery, but with appreciable

points of difference both in organization and procedure. An exception may be made in the case of extremely long-range guided missiles. These may turn out to be Air Force weapons, complementing the Air Force's strategic bombing mission. In general, however, atomic guns, guided missiles, and rockets will be Army unit weapons. Their tremendous power calls for closer control by commanders authorized to dispatch atomic missiles. Battalions organized to fire these weapons will need both security and logistical support greatly in excess of that furnished today's artillery.

To wrestle with the new and complex problems created by atomic weapons, two kinds of staff specialists will be

needed.

First, technical specialists will be required on all staffs whose commanders are delegated authority to use atomic weapons. They will be trained to advise commanders on the weapon's potential, the choice of fuze settings, the height of burst, the desired bomb power, and the mode of delivery which will accomplish the mission with the least expenditure of fissionable materials. These atomic specialists will fully understand the logistical problems involved in each means of target delivery and will advise commanders on the logistical feasibility of a proposed weapon's use. As an addi-

tional task, they will make recommendations on the locality, with regard to time and distance, in which several atomic missiles may be exploded. For the principle of concentration implies that atomic missiles will not be expended singly, but rather that an opportunity will be sought for a decisive blow through their concentrated use.

At the beginning of the atomic operations planning, advice on how many weapons to use and on selection of targets will be the function of specially trained general staff officers—the second class of atomic specialists. Once instruction in the tactical use of atomic weapons becomes widespread, such knowledge will be part of the training of all general staff officers. Thorough knowledge of tactical atomic capabilities and limitations will permit these general staff officers to advise commanders on the integration of atomic weapons into their operations.

Much of the pattern for protecting our own troops is worked out by the coordination of infantry plans with artillery, tactical air, or naval gunfire support. Prior to dropping atomic missiles in front of friendly troops, front-line units must be prepared to exploit the resulting damage to the enemy. All units, including reserves, must be alerted for swift movement into the target area. Friendly air must be so accurately advised of the location and time of explosions that it will avoid the danger space. If the target is so close that its destruction might endanger unsheltered friendly troops, the warning must be precise enough to insure the use of foxholes and other cover at the moment of detonation. Rapid, yet secure dissemination of such information must become second nature to all staffs. Provisions for handling atomic plans must be included in all SOPs to include the regiment.

A TOMIC weapons used offensively will not be delivered for their destructive power alone but in conjunction with other means of accomplishing the mission. The disorganization of the enemy's command structure and communications and the psychological stress of atomic explosions, must be exploited to the fullest before the enemy has time to pull himself together.

Fortunately for the quick follow-up, no radiation danger exists for our troops when penetrating as swiftly as possible in the wake of an atomic air burst.

After-explosion conditions, for ground and underground bursts, have not yet been released for publication. Even in such explosions, casualty causing residual radiation should be of relatively brief duration (hours rather than days) outside the radius of the clearly discernible crater effect (the lip-mound as well as the hole itself).

Immediate exploitation may be impeded by fires and debris. Some roads may be blocked; thick, dry brush may be ablaze, but in country open enough to permit normal troop movement, no serious obstacles are likely. Future atomic tests will doubtless furnish valuable information on these points. Meanwhile plans should be made for rapid movement with complete disregard of the hitherto exaggerated radiation hazard. Contingency plans should assure cross-country mobility in case roads are blocked, and should provide engineer assistance to clear blocks.

A possiblity in atomic warfare is the hostile use of mines, atomic or conventional, to block an area where our advance is anticipated. The effect of atomic explosions on buried mines, atomic or

conventional, has not yet been announced.

Even if atomic explosions fail to destroy conventional enemy mines, the delaying effect of these mines will be minimized if we cut channels through mine fields while hostile covering fire is still silenced because of our atomic attack. This applies to all forms of obstacles, natural or artificial, which may be encountered in the advance. The adage that "an obstacle not covered by fire becomes only a nuisance" is truer than most. Division plans for exploitation should emphasize the urgency of passing all obstacles while the enemy is shaken and unable to fight back.

The importance of accurate, timely information of the enemy can scarcely be overrated by the commander planning an atomic attack. Not only its significance to higher command echelons, but also its bearing upon the actions and orders of the division commander call for greatly improved intelligence procedures and techniques.

Division G2s must devote more attention to their "essential elements of enemy information" (the EEI of textbooks) before shunting off the burden to unit commanders' patrols and observers. Units must be told what to look for and the conditions which will lead to the discovery of possible atomic targets. They must also be told what specific items logically hint at enemy intent to use atomic weapons. The G2 staff must get well forward to assist the combat units.

Staff atomic advisers will have to spend much time with G2 sections in the division. The problem will be accentuated as long as atomic weapons remain a mystery to the soldier who goes out on patrol or who furnishes the point of every advancing column.

DEFENSE: Can Atomic Weapons Plug the Dike?

N the late summer of 1951 in discussing the defense of Western Europe, General Bradley, Chairman of the Joint Chiefs of Staff, said: "The atomic bomb will make a formidable defensive weapon" if the aggressor is compelled, by terrain and by the efforts of ground troops, to "channel his attack along the natural routes of march."

The place to hit an aggressor with atomic explosives is the spearhead of his marching armies. This threat to the forward portion of an aggressor's military forces can be made very real, as Gen-

manpower-rich and small, highly trained armies
eral Bradley stated. At this turning point suited range from destruction of enem

Atomic weapons may be the "equalizer" between

eral Bradley stated. At this turning point in military development, tactical employment of atomic weapons may weigh quite as heavily as their strategic potential in the over-all defense plans of the Western World.

The use of atomic weapons against land forces is militarily sound. The tactical tasks for which they are eminently suited range from destruction of enemy communications, supply, and transport centers to shattering his field formations massing for attack, or neutralizing his supporting airfields.

If we have atomic weapons for tactical use, there will be a limit to the number of divisions a foe can concentrate in a given area without exposing

them to crippling losses. The huge logistical concentrations near the front, essential to massed attacks, are likewise vulnerable to this most powerful weapon. Thus an aggressor army's steamroller tactics can be severely penalized in two ways. If the steam roller's logistics (its motive power) break down, the Western armies' superior mobility and control can be made to pay off. If atomic weapons can diminish enemy troop density in combat, either by inflicting casualties or by close interdiction, the security of the West can be more easily assured.

Whether or not both sides plan to use atomic weapons against armies and their supporting services, it certainly will be to our advantage to do so. This is one field in which our superiority-in numbers and varieties of atomic weapons -is not likely to be neutralized. If the atomic bomb, by supplementing our smaller armies and their supporting sea and tactical air forces, can swing the tide of land battle to the side of the West, then our greatest problem-the lack of vast numbers of trained and equipped divisions-will not be a binding handicap.

In short, the atomic bomb makes it possible for the West to resist aggression with a relatively smaller number of divisions. But there must be alert, highly trained fighting men, equipped with the most effective means of modern war. Yet we must remember: the tactical employment of atomic weapons is no simple, cheap, easy solution to our vital security responsibility. The United States and its allies will still need many divisions, backed by adequate tactical air

HE use of atomic weapons by defendling armies requires special conditions for success. Concentrations, either of enemy troops or matériel, are required; otherwise, the dispatch of atomic missiles would not be justified. Consequently an opponent must be compelled to concentrate on or near the battlefield-by the strength of our defense, by stratagem, by maneuver or by a combination of these. Reliance upon building up defensive strength through sheer mass alone will leave an army wide open to hostile atomic missiles. Thus efforts to make the enemy concentrate cannot also result in the concentration of our forces.

The atomic-age commander whose army, confronted by superior forces, must assume the defensive, has the difficult task of disposing his troops so that their strength is great enough to compel the attacker to mass if he would advance, yet they remain sufficiently dispersed to preclude destruction or fatal damage by the atomic missiles which will probably precede the enemy's assault. These contradictory tasks cannot be accomplished by sedentary defense. Von Leeb's "liberty of action," attainable only by swift, brilliant maneuver, will be as essential to defending commanders facing and employing atomic weapons as it was to Von Hindenburg at Tannenberg and the Masurian Lakes. The increased range and striking power of new weapons invariably open wider vistas for the genius of military leadership.

In the aftermath of World War II, many writers concluded that, because of the increased mechanization of armies and the immense logistical arrangements required to support them, field commanders were losing their personal in-fluence over the conflict. The general's role, so we were told, had become that of a corporation board chairman. If that conclusion had been even remotely true. the entrance of the tactical atomic bomb on the battlefield would kill it. Atomic warfare will tax generalship as never before by vastly enhancing the price paid for each failure; or conversely, by holding out unbelievable rewards for "outgeneraling" the enemy.

THE defending commander will desper-ately need swift, accurate intelligence -reliable estimates of enemy atomic capabilities and intentions, spot reconnaissance of weapons which could deliver atomic missiles, and locating targets of opportunity for his own missiles. Since his adversary has the initiative, timely



The atomic gun is an artillery piece but tactical atomic weapons may be too limited in supply and too valuable to be used on area targets or blanket interdiction missions.

information will be more difficult to obtain. But even should he possess that knowledge, the defending leader has barely begun the estimate which leads to his decision. The information will unquestionably aid him in disposing his own troops, but it will not tell him how the enemy's superior strength can be reduced to the level where a successful counterattack can be launched.

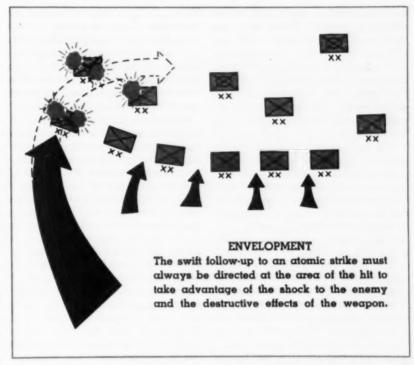
This "uncertainty of battle," as Von Clausewitz called it more than a century ago, has not diminished; it has, on the contrary, become more complex. The traps into which the defender would beguile his attacker are no longer sunken roads, enfilading canister, or concealed cavalry charging an exposed flank. They now have become situations where he may use atomic missiles against the unwary foe. The classic example of Hannibal destroying a superior Roman army at Cannae still typifies the ultimate in tactical art. Only the nature of the enticement and the method of the kill will take on new forms.

Defensive campaigns in atomic warfare must be based, fundamentally, on a sound appreciation of the enemy's atomic capabilities and his probable mission; for once developed, these will have an impact on the defender's assigned mission.

Whatever his orders, the commander must adjust his plan of maneuver so as best to meet the attacker's presumed objective and his combined atomic-conventional capability. Calculated risks must be taken. That term cannot be permitted to cloak ignorance of the risks involved but should emulate the careful reckoning of a Lee on defense at Culpeper, detaching his "right arm," Jackson, to seize Manassas Junction while he deceived Pope's Yankee host with a fraction of the Confederate Army.

Some portion of the atomic age commander's defending force, including his line of communications, will almost inevitably be more concentrated than will be safe. Those portions must be concealed, be made too mobile to be dangerously hit, or so deeply dug in that their mass is reduced in terms of atomic attack. The dispersion cure-all, for protection against the new weapon, is utterly meaningless until analyzed and applied to a specific set of conditions.

NEW weapons have never eliminated the basic tactical advantage that accrues to the defender. Digging in is still the soldier's best safeguard—providing he does not succumb to the psychology that often plagues "fortress" troops as-



signed too long to defensive positions: voluntary abandonment of his freedom of maneuver. Deep foxholes decrease appreciably the ranges at which atomic explosions are lethal. A rule of thumb may be derived from study of World War II formations on numerous battlefields: an American division, deployed for defense, can be terribly shaken by two correctly placed 20 KT (nominal) atomic missiles. This "rule" does not allow for the greater protection afforded by digging deeper into the ground than was usually done in the last war. Nor does it deprecate the enemy's difficulties of "correctly placing" two A-bombs. An evaluation of divisional deployment for attack in the same campaign indicates they were almost twice as vulnerable as on defense. Like all "rules," its value lies in comparing atomic capabilities with conventional weapons.

Foxholes with the head of the occupant three feet below earth's surface buy safety from a nominal bomb's blast and flash heat unless extremely close to ground zero—around 700 yards for the normal bomb. Gamma radiation will be sufficiently absorbed by the intervening earth and no worse than a delayed sickness dose will result.

Three feet of solid earth above the occupant require foxholes about six feet deep, for men squatting in them; or four feet deep for men in prone positions. That means more work than American soldiers usually devote to the task. In rocky soil such digging is impossible on

any widespread basis. In sand, revetting to prevent cave-ins somewhat compensates for the easier excavation.

While getting men and equipment below the ground surface is the chief consideration, there are other complementary means of avoiding the enemy's deadly blast. Revival of the neglected art of camouflage and greater use of natural concealment are musts in troop training. Until a target is definitely located it will not draw atomic fire, except in special instances where key terrain features are occupied. Atomic weapons will be much too scarce to expend in the searching or interdiction fires of conventional artillery.

Mobility is also a protective measure, especially when the bomb is delivered by airplane. The time has not yet arrived when planes will be aloft, armed with atomic bombs, waiting for targets of opportunity. There must be a time lag—perhaps of hours—despite the efforts of intelligence, high command, and air force to reduce the interval between the reporting of a target and the bomb's delivery by plane. If movement is not detected and if new instructions are not swiftly given the plane, an invaluable missile will be wasted on empty terrain which the "target" has evacuated.

The effect of thick weather slightly favors the defender. If the attacker exploits fog to conceal his advance and lessen the heat effect of atomic missiles on his exposed troops—and heat is the greatest personnel destroyer—he also re-

duces his chance of atomic attack on the defender's reserves. These latter can move by a choice of routes while any offensive penetration must traverse ground already registered by defense artillery and radar controlled bombers. Only when the attacker is short on atomic missiles but relatively rich in manpower will heavily overcast skies benefit him.

The configuration of the terrain selected for the defense will affect bomb power relatively little, according to current data and assuming nominal missiles. It will decrease if larger "caliber" missiles are used. Trees will certainly be blown over and in dry seasons fires will be kindled. Until more reliable information is available, commanders should look with disfavor on small wooded areas. However, expanses of forest large enough to require a number of bombs to entirely cover them, may be valuable as hiding places for reserves and as assembly areas.

ARTILLERY positions, quickly located by sound and radar ranging devices, will no longer enjoy the comparative safety they did in the last war. After front lines have been outlined by patrol action and a few batteries spotted, the deployment of divisional and corps artillery can be sketched with an accuracy sufficient for an attacker's atomic weapons. Present-day dispersion between batteries and battalions is governed by considerations of conventional weapon power, counterbattery and fire and air strikes. An atomic missile exploding near the center of a divisional artillery area could cause severe losses of crews and fire control equipment although damage to the guns and ammunition would in all probability be less critical. The approximately five square miles throughout which the nominal bomb causes casualties to troops in the open can easily include supporting artillery.

Defenders' artillery is a more advantageous target for pre-assault atomic strikes than infantry in foxholes. Crews must remain at their guns and are therefore more exposed than foxholed infantry. Accuracy limitations of atomic missiles involve the ability to hurt targets spread rather uniformly over a large area rather than the more linear deployment of infantry. Also attacks in these behind-the-line areas reduce the risk of misdirected bombs hitting the attacker's forward elements.

Countermeasures can and must be devised. The traditional artillery expedient of alternative positions will not work.

For one thing an atomic blow can fall too suddenly to permit a move. For another, the displacement practicable from one position to another will be meaningless in the face of atomic threats. Ranges of direct support artillery, no less than movement time required, will not permit such violent dislocation.

Foresighted gunners are, therefore, suggesting that gun crews be smaller and the men be relieved at short intervals by other gunners resting in nearby foxholes. This reduces the number of troops exposed and, if the shelters are deep enough, provides replacements ready to resume fire with guns undamaged by atomic blasts. Guns themselves can be partially dug in and the spoil heaped up in thick flat revetments to increase the protection. Bulldozers to speed these semi-underground firing positions may have to be added to standard battery equipment, further burdening the logistical support. The mobility of self-propelled guns furnishes another argument for their proponents, expensive though they are, since their tenancy of a position could be brief. However, their crews are little better shielded from atomic blast than those of ordinary ar-

Radar and electronic fire-control equipment does not possess the rugged qualities of the guns. Command posts and control stations must be dug deep indeed as well as furnished fire-resistant canvas cover (against flash heat) to the maximum possible. Stratagem and ingentity must explore means of siting artillery support in new patterns, as unlike recognized standards as wit can make them. Camouflage is of little value as long as the artillery mass can be adequately located by its relation to overall defensive formations.

THE road net gains importance in atomic combat. With numerous usable routes, allowing rapid concentration on call, troops and transportation can be more fully disposed in linear arrangements, which make less remunerative targets than area ones. Where roads are few and far between, as in Korea, concentrations along them become hazardous, yet difficult to avoid without detriment to essential mobility. Engineer road building and maintenance demands will increase in order to speed the maneuver of reserve striking forces.

Warning can play a vital part in atomic defense, locally as well as in the broad scheme of things. Troops cannot always stay in deep foxholes. Artillerymen must come out of protective emplacements oc-

casionally. Tank crews can't stay buttoned up indefinitely. Even in reserve some men must be on watch, gathering in mess lines, relaxing—all exposing themselves. Defense SOPs must include swift code warnings to threatened localities, if advantage is to be taken of available cover.

THE timeworn aphorism, "troops committed to combat are on their own," was never more true than in atomic warfare. Commanders and their staffs must foresee and provide against atomic disaster, not hopefully expect to overcome it after the blow falls. This will call for continuous estimates of the atomic situation of the division. Just how vulnerable is the division now? What steps can be taken to reduce that vulnerability? What changes in the situation will tomorrow bring? How to prepare for them?

Sound, detailed plans, always ready to become emergency orders, must provide for the division's reaction to atomic attack in various portions of the sector. The action needed to rally from an attack on the divisional artillery will differ radically from that needed if the reserve is hit. These plans also must include the conduct of the division if adjacent units are pounded but the division itself is unhurt. Broad directives on these eventualities will be furnished by corps (or army) but their translation into emergency plans and troop rehearsal of those plans will be the task of the division commander and his staff. Always prompt effective action to counter the inevitable hostile exploitation must be the guiding principle. Atomic missiles can perhaps cripple an army; the exploitation which follows their blast may well destroy it.

Whenever possible, units unfavorably deployed should be quickly relocated. Each new position occupied under the stress of combat must be staff-examined to make sure that it fits into the over-all defense of the division.

Divisional trains and service areas should be located for the best possible protection against infiltration and placed at the maximum possible distance from artillery and reserve positions to decrease the attractiveness of the target they offer.

In defense the dispersion of supplies is relatively easier, since the distance they must be moved forward to reach the troops is either fixed or is being reduced—not continually increasing, as in an advance. Yet here, also, defensibility from ground attack makes a counter-demand. Terrain permitting, night move-

ment for supplies as well as for troops should be stressed. Combat trains should be kept stocked and mobile. Small, concealed stocks of rations, ammunition and possibly gasoline should be placed conveniently to the rear of regimental combat teams. Building up stocks within the division area should be forbidden, except in position defense where the area is to be held even though encircled. Helicopter evacuation of casualties can be combined with the delivery of small-package, critical supplies, direct from corps or army dumps.

As a general rule, mobility must be preserved, at the cost of supply build-up, by all echelons. Maneuver is as vital to the defense as it is to the attack.

T is probable that division commanders and their staffs will have a greater hand in target determination on the defense than on the offense. Planning prearranged atomic fires, to protect a possible corridor into our main defensive positions, will be vastly more important than planning a prearranged artillery barrage is now. No one knows better than the division commander when the integrity of his force is seriously threatened. Confronted with an overpowering enemy thrust, he may call for tactical atomic fire power to be delivered by rocket, very heavy artillery, or tactical air.

Delivery of atomic missiles by airplane involves comparatively slight changes, except in degree, to the familiar tac-air support of ground forces. But targets must be far more carefully evaluated, to avoid wasting so valuable a missile. Safety measures for the division's own troops cannot be left to a take-a-chance attitude.

Several typical missions may be assigned the defender's atomic weapons: (1) weaken the enemy prior to our counterattack; (2) destroy hostile con-

centrations (men and matériel) which might otherwise soon arrive on the battlefield; (3) curtain the withdrawal of a hard-pressed element of our forces.

The second and third are not subject to detailed pre-planning, although some preparations may be made to meet their emergencies. But the first must be integrated into every appropriate counterattack scheme. Not only will feasible locations for enemy massing after a penetration into our lines be precisely covered by "on call" fires of atomic weapons, but locations which might conceivably become objectives of sorties out in front of our main defensive lines must be the subject of comprehensive counterattack orders.

If weapons capable of delivering the atomic missile should be attached to the division, additional responsibility must be assumed at the divisional level. Although this is not likely now, it may occur in the not too distant future. Restrictions on targets, time of fire, and other matters will doubtless be quite different from the restrictions placed on attached conventional weapons.

Numerous tactical and logistical burdens will fall to the division commander. He will become vitally concerned with the selection of positions, with measures for detection, and with the security of both atomic weapons and nuclear components of missiles as soon as they enter his area. He will also have a much larger share in target analysis and selection. Furthermore, the movement of weapons, the transportation of atomic missiles and nuclear components, and the special measures required to support atomic batteries will put an added strain on the division G4. Finally, it will be up to the division to evaluate and report the effects of its missiles after delivery on the target-a task involving technical aspects as well as special intelligence from forward elements. In these instances, the division staff will benefit particularly from the aid of the atomic advisors and technicians.

UNTIL the day when atomic weapons are just another awful aspect of the battlefield, their psychological impact cannot be given too much attention. The debilitating effect of fear is always present. And of all fears, dread of the unknown is the most difficult to conquer.

The key to a successful defense is a counterattack. Therefore, all troops must be thoroughly informed about the terrifying phenomena they will experience in an atomic counterattack. Only if they have complete confidence in the results, will they exploit the break-through with the impetuosity that is vital to success. False notions of radiation dangers and alleged contamination—through enemy casualties, terrain or equipment—must be dispelled by instruction which the troops understand.

Unit commanders should be shown that the risk of hostile atomic counteraction resembles, on a disproportionate scale, the risk of enemy artillery counteraction. Exposure of immobilized units to enemy observation will invite destruction; therefore success lies in launching swift pursuit action against the disorganized foe. Strict though decentralized control of subordinates and rapid organization of new positions will be the best protection.

Soldiers below field grade who have participated in maneuvers where the atomic bomb was actually exploded should be given opportunities to recount their experiences to soldier audiences. The personal note—with the tendency of veterans to favorably exaggerate past experiences—would convince many who might be skeptical of scientific information.



The fast exploitation of an atomic strike will be rewarded with prisoners and relatively undamaged weapons and equipment. These weapons were in the area of burst of a test atomic explosion on Frenchman Flats.

CAREER MANAGEMENT AND YOUR FUTURE

AS the combat arms soldier surveys his present condition and future prospects, he wonders if Career Management Division is capable of giving him the helping hand he needs to make his career as a soldier meaningful. He hears talk of "career manglement." He hears that officers of the administrative and technical services get a better break because they have a Chief in Washington to represent them. And he hears older officers talk of the days when the offices of chiefs of combat arms "really took care of us."

It is perfectly obvious that if Career Management is doing its job, such comments as these are based on a lack of an understanding of how Career Management works and its difficulties in cold and hot wars.

Recognizing this, Major General James C. Fry, the Chief of Career Management, and his staff are preparing a series of articles on career management and how it works. These comments will appear in future issues of this magazine.

General Fry had this to say about the mission of Career Management and the need for a full understanding by all officers of its policies and methods:

"Our Career Management goal is to rotate officers through different assignments in order to develop to the utmost the inherent abilities, aptitudes, skills and accumulated knowledge of a maximum number of officers.

"When conflicts between our Career Management Program and the combat requirements of the Army occur, Career Management assignments must of necessity be interrupted. As a matter of fact, the basic concept of Career Management was that the program was intended to apply solely to the peacetime development of officers and this fact needs more thorough recognition.

"There are no mysteries or secrets about assignment policies and I hope to have published detailed information about how CMD assigns officers and the procedures it uses in selecting officers to attend military schools.

"There are good assignments and there are others that offer no particular professional advantages or other attraction. But all assignments must be filled, and the officer who has a satisfying assignment this year should realize that he is moving into a category that makes him eligible for a less desirable assignment."

The editors hope that our readers will tell us whether they think the series is useful. We shall also welcome questions about Career Management and shall endeavor, with General Fry's assistance, to answer them as clearly and fully as possible.

Who Goes to School?

THE Army's military education program follows two general patterns. One progressively develops the overall potentialities of an officer and the other teaches specialization in particular fields.

Specialist education is taught at branch schools, the Army General School, the Army Language School and other similar institutions. The various courses offered by these schools are listed in the Army School Catalogue, Department of the Army Pamphlet 20-21, which is published annually. Attendance is by application or selection on a quota basis to meet the requirements of the Army in each particular field.

Career-type education begins with the basic courses in the branch schools and extends on an increasingly selective basis to the Army War College which is the apex of the Army's military educational system for officers.

The new second lieutenant attends the basic course at his branch school. After several years of troop duty but before finishing twelve years of service, each Regular officer and a quota of Reserve officers will attend the regular advanced courses of their arm or service. All other Reserve officers on extended active duty, and a percentage of Reserve officers not on active duty, attend the associate advanced courses. At the ad-

vanced courses, officers receive instruction peculiar to their arm or service that fits them for duties above the company or battery level. They also receive generalized instruction that prepares them for staff assignments on higher levels.

Following the advanced courses of the branch schools, career education becomes competitive.

The Command and General Staff College is the first school where attendance is on a selective basis. It conducts an annual course for Regular officers and two associate courses each year for Reserve officers. Each branch has an annual quota based on mobilization requirements, in proportion to its authorized strength and prescribed mission. Based on current student quotas approximately fifty percent of all Regular officers will attend the Command and General Staff College.

The Army War College is the next higher school. Since the authorized enrollment for the 1953-54 course is only 200 officers, you can see that attendance is on a high selective basis. Graduation from the Army War College represents completion of the Army's formal education requirement for the assumption of high-level positions in the Army and the Department of Defense, and those which the Army might be called upon to fill with other governmental agencies.

The joint colleges parallel the Army's education system. These are the Armed Forces Staff College, Industrial College of the Armed Forces, and the National War College. Due to limited quotas attendance has been confined to Regular officers.

Navy, Marine Corps, and Air Force colleges invite the Army to send officers to their colleges. Quotas are limited and attendance is by competitive selection. A number of foreign colleges also extend invitations to a limited number of Army officers. Each foreign college is considered on a comparable level with one of our own colleges, and graduates are given the same consideration in selection for further schooling as graduates from the corresponding United States college. The foreign colleges presently extending invitations are listed below, together with the comparable level United States college.

National War College or Army War College Level

British Imperial Defence College Canadian National Defense College French Ecole Superieure de Guerre

Armed Forces Staff College Level United Kingdom Joint Services Staff College

Command and General Staff College Level

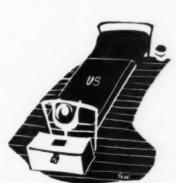
Australian Staff College British Staff College Canadian Staff College French Ecole Major d'Etat Indian Defense Services Staff College Italian Army War College Pakistan Staff College

Graduate level schooling in the physical and social sciences under the Army civil schooling program has increasing importance. A subsequent article will cover this program in detail.

COMPETITIVE selection is not widely understood if the number of inquiries received by the Career Management Division is representative. It means simply that all officers of a branch, in the zone of consideration established by the prerequisites for attendance at a college, are considered competitively within each branch.

The mechanics of it require that the names of all officers in the zone of consideration be arranged in order of merit according to existing records. Factors used in developing this list include: command and staff experience; combat duty; experience on school staffs and faculties; previous military education, civilian components and assignments; duty with military missions, as military attaché, and duty with joint staffs or other services; promotions, demotions, and disciplinary actions; efficiency ratings; and age and years of service.

Selection methods. A detailed explanation of actual methods of selection would be extremely difficult. Records of all officers in the eligible groups are studied by mature and unbiased officers. Qualifications of each are checked off on work sheets. Great weight is given to command experience and demonstrated leadership. The broad pattern



of an officer's experience is considered and the degree to which officers have met demands that would seem to index this future potential are evaluated carefully. The officer's overall efficiency index for the past five years of service, as determined from efficiency reports, carries great weight. But this is not the sole deciding factor. The method can be summed up as careful, unbiased selection based upon best available information, weighing carefully the qualifications and interests of the individual officer and the requirements of the Army.

It is not necessary for an officer to submit an application to attend one of the service colleges. Officers are considered by their arm or service automatically from the time they become eligible until they pass out of the zone of consideration. Moreover, selection is without regard to geographical location or assignment. However, officers desiring to attend an Air, Navy or foreign college in preference to an Army college, should indicate such a desire on their annual preference cards.

Eligibility prerequisites for Army and joint colleges may be found in SR 350-20-1, SR 350-195-1, and DA Pamphlet 20-21. Prerequisites for the Air, Navy and foreign colleges are similar to Army colleges of comparable level. An outstanding officer may be considered and selected for a service college although he does not meet all the prerequisites for that college.

Due to limited quotas, many officers will never attend a high level service college. But this is no barrier to his career progress. As in the past, outstanding leaders will be developed through on-the-job training and a diversity of career broadening assignments.

This last facet of career development deserves more emphasis. All officers cannot expect to attend our top military schools and it is evident that some of those selected will not necessarily prove to be our ablest officers in time of emergency. So, many officers who were not selected for higher schooling may make their way into the select group of general officers who guide our armies in time of war. A most striking example of this from the relatively recent past is the career of General James A. Van Fleet whose abilities lifted him to high and distinguished command, despite his lack of formal military education above the advanced course of his basic arm.

[Next month: How your assignments are made.]

Building Community Relations

Captain Frederick Jenkins

COMMUNITY programs successfully practiced by the 5th Infantry Division included three-day open houses for parents of trainees in the seventh week of training, with "foster parents" from surrounding Pennsylvania communities invited to participate; adoption of training battalions by cities and hamlets near the post; and visits of farm-bred trainees to farms in the region over week ends.

A further development of these programs resulted in the "adoption" of a number of orphans by trainees of one hattalion.

Each of the programs had a minimum of Army direction and every effort was made to let communities and families direct their own activities. The Division planted the seed of the idea in the minds of potential participants, and except for occasional behind-the-scene watering and weeding sat back and watched it grow.

In the belief that recruits make better soldiers if their families are given a first-hand taste of Army life, battalion commanders wrote to each soldier's parents shortly after his arrival for training. This letter told the parents about pass rules, why trainees could not have their own cars on the reservation, the need for cheerful letters, and how parents could help their sons avoid going AWOL. The letter also invited the parents to the Open House the battalion held at the end of the seventh week of training.

The letter listed approved hotels and motels in the area and stated that the Army was unable to assume any of the expense of parents during the visit.

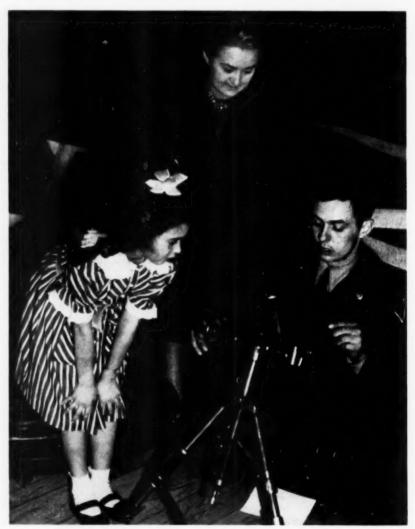
THE first Parents' Open House was typical of all of them. It began on Saturday afternoon with about 300 parents of trainees in the 46th Field Artillery Battalion assembling at a service club where they met their sons and were given a helping hand in finding lodging for the week end.

The first event was a dance at the service club. The commanding general, regimental and battalion commanders THE creation and maintenance of good community relations is a most difficult task for commanders of large training centers where thousands of young soldiers in a few short weeks go through new experiences that subject them to tensions that are completely foreign to their previous ways of life.

The problem is twofold: to make the transition from home and civilian life to the life of a soldier as easy and painless as possible, and to create in the surrounding community an interest in and respect for these American boys, who though they come from homes several hundred miles away are not unlike the native youth of the community.

Many commanders have wrestled with these problems and solved them in ways satisfactory to the local situation or in ways satisfactory to their own ways of doing things. There cannot be any hard and fast rules—if there were they would have been reduced to official doctrine in the dry language of regulations long ago.

Before it was closed down recently, the 5th Infantry Division at Indiantown Gap Military Reservation, commanded by Major General George B. Barth, had worked out a most effective program that is worthy of attention.



Mom looks on while big brother shows kid sister how to fire the 60mm. mortar. Mrs. Julia Renni and daughter travelled from Milwaukee to Indiantown Gap to visit Private Robert Renni during the 19th Field Artillery Battalion's "Parents' Open House" at the end of the seventh week of training.

CAPTAIN FREDERICK JENKINS, Infantry, was the Public Information officer, 5th Infantry Division.

and their wives attended and talked with as many parents as possible. This gettogether gave a parent a chance to talk with his son's immediate commander and with other officers in charge of his training and well-being. Mothers were especially interested in talking to wives of officers.

Junior officers and their wives supported the program and many of the young wives served as unofficial welcoming committees, greeting parents and making them feel at home.

Dance partners were USO junior hostesses from nearby communities. At the end of the dance, parents departed for their overnight accommodations and trainees returned to barracks.

The next morning the parents attended an all-trainee battalion parade. Fathers who were veterans were asked to judge drill competition. After seeing a display of all the weapons and training aids used in the 16-week cycle, parents and sons visited company officers, noncoms, and fellow soldiers.

After the noon meal in the battalion mess hall trainees were given special passes, good until reveille Monday. This gave them the rest of the week end with their parents. It is worth remarking that some trainees accompanied their parents to the post chapel for Sunday morning services.

One of the chief objections raised when the Parents' Open House program was first suggested was the matter of housing. Some senior staff members were afraid that some parents would arrive at the post, say, "Here I am. You take care of me," and overtax housing facilities. But not a single such case occurred. The furnishing of a list of approved motels and hotels in the area in the letter the battalion commanders mailed out made it clear that the Army could not furnish quarters.

Distance was no barrier to participation. Parents came from as far as a thousand miles to be with their sons.

THE community "adoption" program began when delegates of the Lebanon (Pennsylvania) USO Council asked General Barth if they could invite a battalion of trainees to Lebanon homes for Easter Sunday dinner.

General Barth believed that if one community wanted to entertain men in their homes, other communities probably felt the same way. A few discreet inquiries proved this was true. Letters requesting the opportunity to entertain trainees "just as we'd like our own sons in the service to be invited into the



Two Red Diamond trainees are Sunday guests of a family living in a nearby community. These "foster parents" affairs were highly successful.

homes of other families," began to flow into the headquarters.

Certain specifications were established. When a large number of community residents had shown a desire to adopt a battalion, a delegation of civic leaders from that community was invited to visit the post and invite the assembled trainees to be their guests on the Sunday following their third week of training.

The timing of the battalion visit to a community was particularly important. It was desirable that the event be held before trainees became eligible for their first passes. That was why the third week end was selected.

Local sponsors—chambers of commerce, USO Councils, or other civic groups—listed the names and addresses of families who would entertain one or more soldiers and assigned soldiers to them. The Army provided transportation to and from a central point in the town.

Families that "adopted" a soldier were invited to be guests at the Parents' Week End Open House at the end of the seventh week and meet the soldiers' real parents. They were also honor guests at the graduation exercises at the end of the training period. Many firm friendships between "foster parents" and real parents developed.

Host families took their "new sons"

home for a family dinner, visited with them for a few hours, and then accompanied them to a special program of entertainment or dance sponsored by a civic group.

Local newspaper editorials have praised the adoption program as an "exciting adventure in hospitality" and a "tribute to the American spirit of neighborliness."

This "foster community" plan has given more than 5,000 trainees from the 5th Infantry Division a "home away from home." Sunday dinners and warm hospitality have created many friendships between local citizens and trainees, many of whom were away from their own homes for the first time in their lives.

THE Chamber of Commerce of one of the smaller towns requested the privilege of adopting a battalion, then reported they needed help in "selling the idea" to townspeople. It seemed that during World War II, troops processing through Indiantown had created trouble in the town and some citizens still had a distaste for men in uniform. This was a real challenge.

A special brochure was prepared for Chamber officials. Included were favorable clippings of new stories and editorials from newspapers of other towns that had taken part in the program as well as letters from mayors, clergymen, trainees, and hosts all praising the program. With fingers crossed, the once-bitten townsfolk agreed to go along with the Chamber and invited a battalion to be their guests. The Army now has an unblemished reputation in that community.

Battalion officers were encouraged to write "thank you" notes to the committees responsible for planning and executing the program. Individual soldiers seldom needed to be reminded of their duty in thanking their hosts and hostesses.

AN outgrowth of the Training Battalion Adoption Program was the "adoption" of an entire orphanage in Harrisburg by the trainees of the 1st Battalion, 10th Infantry, which had been entertained only a few weeks before by the citizens of that city.

Again, the "spontaneous" approach was used. The idea was casually broached to the Battalion's Privates Council by Lieutenant Colonel Arthur C. Blanton, the battalion commander. The council went for it enthusiastically.

Again the main problem was to slow down the enthusiasm of the sponsors this time, soldiers. More than a thousand dollars were contributed in less than three weeks by the trainees.

Three television sets were given to the Orphanage. Groups of orphans were taken on tours of the post, where they enjoyed athletic contests, ate in mess halls and saw movies in Army theaters. Many of the children were taken on outings to amusement parks and movies by the trainees.

The perennial trainee problem of what to do on a free week end was solved. They'd visit the orphanage, teach the kids how to play baseball, or just talk.

The graduation of the battalion spelled the end of the orphan adoption. It would have been carried on by other battalions had not the inactivation of the division been in the works.

THE program for farm-bred soldiers was sponsored by the agricultural committee of the Lebanon County Chamber of Commerce, the Grange, farm women's groups, and individual farmers.

On succeeding week ends, groups of

trainees were met at the Lebanon Farm Bureau Office by farm families. Each family would take one or two farm-bred soldiers home for the full week end. The men would shed their uniforms and don the clothes they'd thought they'd not be wearing until their term of service was over. Comments from host farmers have been good, and men interviewed upon their return have expressed admiration for the Pennsylvania Dutch farmer and his methods. Farm boys from Minnesota and other states have thus learned something of the farming methods of their hosts.

From these programs, the 5th Division has learned a simple formula for successful parent and community relations:

Tell a few civic-minded citizens in the communities what needs to be done for the men of your command. Then sit back and watch those communities go to work. All they want is to be told what the needs are. The commander may have to encourage the workers at times, but he never does it publicly. The natural expansive heart of the "informed" American citizen does the job for the Army.

A Pennsylvania Dutch farm family show off their herd to two Midwest farm boys in training at Indiantown Gap.



* CEREBRATIONS *

Our literate cocktail-hour tacticians stand to receive as much as \$10.00 for their contributions to this department. However, the price for those "dashed off" with scant consideration for the rules of composition and rhetoric will be much less. Hold them to four or five hundred words and type them double-spaced.

Rate the Rater

Efficiency reports are the means by which an officer's excellence is measured, and his advancement, schooling and assignments to a large degree determined. All agree that efficiency reports are necessary, but not all agree that they

are properly evaluated.

Regardless of what form the efficiency report takes, or how the officer's efficiency is measured, the answer is still given by the individual doing the rating. He may be a "high" rater or a "low" rater, and unless this fact is taken into account the efficiency reports submitted by him have little meaning. It is common knowledge that a particular officer may get "straight 7.0" under one rater for a time, and yet under another rater he can get only 4.2. It is also known that certain types of duty carry 7.0 ratings and others fall in the 4.2 bracket. But these ratings can be rectified and correlated if a rater's "mean rating" is determined, and the difference between his "mean" and the mean of all ratings is applied to each of his ratings.

For instance, a high rater submits twenty efficiency reports, with a mean or average rating of 6.4. Assume that the general mean or average rating is 5.4. Every rating submitted by this high rater should be reduced by 1.0 to account for the fact that all his ratings are 1.0 above the ratings given by all other raters on

the average.

By the same token, if a low rater submits twenty efficiency reports with a mean of 4.6, all his ratings should be

raised by 0.8 to bring them in line with all ratings submitted.

Does this do an injustice to an officer who has received a 7.0 rating from the high rater? While his rating has been reduced to 6.0, he has done as well as the officer who received a 5.2 rating from the low rater, and his rating is 0.6 above the average which still puts him in the high excellent or superior category.

Is this method of correlating efficiency reports feasible of administering? All efficiency reports find their way eventually to a central office of record in Washington. The efficiency report form may be modified to include the number of officers rated, and the mean rating, both of which would be accomplished by the rating officer. The rectification of the ratings should then be done in the final office of record.

Unless some method is used to correlate the efficiency reports of individual raters, and ratings that inevitably accompany certain types of duty, the plums will always go to those who can manage to keep themselves on the gravy train.

Col. D. C. LITTLE
Artillery

Commo to the Signal Corps

If, as a commander, you have ever watched a firefight on a Korean outpost at night, communications is a very important personal subject. Suppose the fight is only 600 yards from where you stand on the MLR. You ought to be able to follow it blow by blow, but as far as knowing what is going on out there, you might as well be on the moon.

Joe Chink is pounding the path connecting the outpost with the MLR with mortar and artillery. The land wire you had laid was knocked out before the close-in action on the outpost started. Joe is jabbering away on your radio net. You suspect the operator on the OP is sending like mad but you can't read him. He's probably too excited to shift to the alternate battalion frequency—if he re-

members it. Flares are popping off all around like Roman candles and these with other battle pyrotechnics make visual signalling of any kind impossible.

Something's going on for sure, but what? Frankly, you don't know. You're missing the information without which a commander cannot act intelligently. You can't let that outpost go, so you order a platoon forward from the MLR knowing the only route out is zeroed-in with Chink mortar fire. Blind reaction is more often the rule than the exception in the position-type night warfare. Such communication troubles at the battalion and lower tactical levels have been one of the most serious handicaps confronting the Eighth Army.

Communications are one thing that most of us take for granted until they go out. Indispensable as they are to the sound discharge of command, the status accorded "communications" in the infantry is that of a poor relation. Vast sums of money have been devoted to the development and procurement of advanced communication equipment for our fighting men. Not enough attention has been paid to ensuring that this equipment is operated by competent, interested,

trained soldiers.

Not enough prestige and weight is assigned to the men whose job it is to see that communications work at the point where the fighting is. The relatively low rank which commo men hold in the infantry is revealing. The commo chief in a rifle company holds the same rank as the first cook, but rates below every squad leader in the outfit. There are almost 300 commo men in a rifle regiment. As a group, these men hold lower ratings than their skill should justify.

A young infantry officer who gets tagged with the commo label is taking a chance with his career. It's unfortunate, but generally true, that in the infantry commo is a dead-end street for officers and to a lesser extent for enlisted men.

When we turn over the operation of expensive and complicated signal equipment to men who regard commo as a hindrance toward advancement, we can't expect perfect results. The record shows that we don't get them.

One thing that has not been tried is to make the Signal Corps responsible for the communications down to and including company headquarters. Pushing the Signal Corps responsibility downward would automatically in-



crease the career and professional interest of men responsible for infantry communications. It will not in itself solve all problems but it will fix responsibility for communications on the one group best able to deliver the goods.

This idea is not new. It has so much merit that it seems worth while to restate its advantages. The level at which various specialist functions are taken over and performed by a specialized arm or service is not fixed or immutable. As engineers, quartermasters and signalmen have developed in response to the needs of war, they have been married with the basic combat arms at company, regimental, division, or higher levels. Many of these specialized functions were once performed entirely by the infantry, and in rudimentary form, are still carried on at company level.

Today we find medical aidmen attached to rifle platoons, artillery forward observers with companies, engineer platoons with battalions, artillery battalions working with regiments, and signal and other special units with divisions. It would be just as logical to have the Signal Corps perform the communications function for our infantry companies as it is for the medics to provide company

If the Signal Corps was given the communications mission, our communications would be handled by signal men, not converted riflemen, hastily trained. The senior noncoms and officers responsible for infantry communications would be professionally interested in commo. They would be serving in their main interest, not in a side line. Most important, the Signal Corps would gain from more intimate association with the infantry at the combat level. And the operation, design, and maintenance of signal equipment would inevitably improve.

The chief argument against moving Signal Corps responsibility for communications down to company level is the persistent phobia that the unit commander should own all of his resources outright. This principle continues to have adherents in a day when only the theater commander even approaches possessing command control over all units needed for the discharge of a mission. Lower echelons are daily and even hourly dependent upon many other arms and services for their very military survival.

Aren't we taking too great a risk to permit semi-trained men to handle the first prerequisite of effective command —communications?

Lt. Col. WILLIAM R. KINTNER Infantry

FRONT AND CENTER

THE ARTILLERY SCHOOL

Battlefield Illumination Division

In line with continuing efforts to improve target acquisition, instruction in illumination has been centralized at TAS in a Battlefield Illumination Division of the Department of Observation.

The four officers and eleven men in the division have the mission of organizing and presenting an instructional program in the use of searchlights. In addition, it is responsible for other visible and invisibile (e.g., infrared) illumination research, doctrine, and instruction, as well as the development of techniques for the employment of searchlights.

A course of instruction for the field illumination crewman (MOS 1763) will start on or about 1 September. Three weeks long, the course will cover operation, maintenance, and employment of the truckmounted, 60-inch searchlight. Additional courses for the section chief and for maintenance personnel are now in the planning stage. The division will also present illumination instruction in such general resident courses as ABOC and AOAC.

Crater Analysis

A new POI has been adopted for all classes on crater and fragment analysis. Of particular import is the fact that increased time has been allotted for both conference and practical field work.

The increased time allocated field work is, in a sense, a return to the system previously employed at TAS; it calls for "live shoots" that enable each student crater analysis team to study fresh craters much as they would in combat. Attempts in the past to utilize service practice craters were found unsatisfactory; variety of types was lacking, and distinguishing features were virtually eliminated after one class had tramped the ground.

As an adjunct to conference work, TF 6-1686, "Crater Analysis," recently completed, has been included. TM 30-240, "Soviet Projectile Identification Guide," has been received in sufficient quantity to be made available to students as a training aid.

Technique of Attack

A new class in artillery tactics—"Basic Considerations in Application of Artillery Fire in the Attack of Targets"—is now in the process of preparation. It will instruct artillery men in the determination of the amount of ammunition necessary to produce a given effect on a target of a given nature. The mathematics involved will be reduced to graphical form and will provide S3s a general guide for matching a minimum expenditure of ammunition with desired effect on a target. The Combat

Development Department is providing the statistical data.

It is anticipated the instruction will be included in various POIs in October of this year.

Large Angle "T"

When a large angle "T" (over 800 mils) exists, many of the deviations right or left of the "OT" line seen by the observer are actually caused by normal range dispersion. Observers with limited firing experience frequently have unnecessarily expended ammunition and frustrated themselves in an effort to bring these wandering rounds to the line. TAS is now processing a change to FM 6-40 which emphasizes this vagary of large angle "T" missions.

The change instructs the observer that, in effecting his adjustment, he should take advantage of terrain sensings for range and not try to correct small deviations to the "OT" line.

FDC is also affected in that the HCO is given an additional duty: Required to measure the angle "T" after announcing the range for the initial plot of each mission, he announces that angle to the closest 100 mils if it exceeds 800 mils; this information is then transmitted to the observer immediately after the on-the-way for the first volley; e.g., "On the way. Angle "T" (so many) mils." This procedure insures that the observer is aware of the large angle "T."

Decentralized Fire Direction

TAS is conducting tests of the concept of decentralized fire direction. This concept places the battalion FDC in a supervisory position and makes the battery FDC the working agency that actually determines the commands to be sent to the guns. Special Text 6-40-1, prepared at TAS, covers the system as now developed; this text will not be available for purchase or for distribution to other than students being trained in the decentralized system for testing purposes.

THE INFANTRY SCHOOL

1953 Army Pistol Team

TIS was host in July to fifty-four of the Army's best pistol shots. The twenty best shooters were selected to represent the Army in the West Georgia pistol matches, Fort Benning, El Paso, Texas, and the Far Southwestern Regional matches, the National Pistol matches, Camp Perry, Ohio.

Marksmanship

Several instructors from TIS conducted a course in rifle marksmanship training in August at Camp Perry, Ohio. The course was designed to foster a uniform civilianmilitary method of M1 instruction.

Rifle instructors from the regular Army,

reserve components of all services, and instructors of the National Rifle Association clubs were shown the latest rifle instructional techniques taught at TIS.

Arctic Warfare Schooling

To keep TIS abreast of the latest Arctic warfare technique, eleven officers attended the one-month Army Indoctrination Field Exercise at Big Delta, Alaska. It stressed the problems confronted during an Arctic summer, and included survival, types of food and methods of travel.

Field Expedients

TIS is placing greater emphasis on the use of field-expedient training aids. The aim is to teach students how to construct and use teaching aids made from materials readily available in the field. It is believed

this will aid instructors and raise the standard of Infantry instruction.

Extension Course Revision

The Infantry Army Extension Course program has been revised to parallel the resident instruction now offered at TIS.

Many new sub-courses have been added, some deleted or changed, and a few of the older ones have been retained. The twenty series of the overhauled program is now available for issue to students. The others are expected to be ready on or about the following dates: Thirty series, 1 October 1953; Forty series, 1 April 1954; Fifty series, 1 January 1954.

Prior to the above dates, the sub-courses for the thirty, forty and fifty series, as listed in the Extension Course Program's 1952 catalog, will remain in effect. The present sixty series distributed by the In-

fantry School will be integrated with the fifty series. An entirely new sixty series is now available from the Command and General Staff College.

USAR School Examinations

TIS has mailed its comprehensive yearly examinations to cover subjects presented by Infantry branches of USAR Schools. These examinations were sent to the schools on 30 June 1953 to cover the training period ending 31 August 1953. Examinations included four one-hour tests to be administered and returned to TIS by 15 August.

Material for use with the classroom phase of USAR instruction for 1953-54 was mailed in July. This material included a catalog of instruction and training material necessary for effective presentation.

Reorganization of The Artillery Center

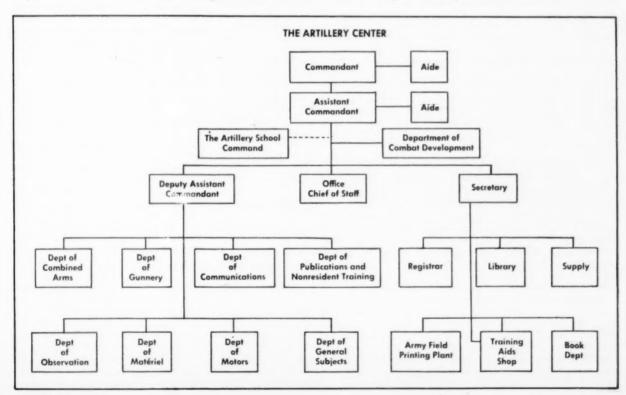
The new organization of The Artillery Center is shown in the chart below. In consolidating and streamlining the operations of the school, the reorganization placed heavy emphasis on the reduction of overhead activities.

All instructional departments will now operate under the newly created Office of the Deputy Assistant Commandant. Combined in this one office are the previously separate functions of the Supervisor of Resident Instruction and the Supervisor of Non-Resident Instruction. Airborne and Special Operations (ABSOP), formerly handled by the Department of General Subjects, have been switched to the Department of Combined Arms. The Department of Train-

ing Publications and Aids has dropped its training aids responsibilities; with its old designation going into limbo, the remainder of its functions have been consolidated with those of the Department of Extension Courses in the new Department of Publications and Non-Resident Instruction.

On the administrative side of the ledger, the Secretary of TAS is now responsible for the Training Aids Shop, the Army Field Printing Plant, the Book Department, TAS Supply, the Library, and the Registrar's Office.

Another important change at TAS was the discontinuance of the Department of Air Training and its re-establishment here on 1 July as the Army Aviation School.



* BOOK REVIEWS *

BRILLIANT EXPOSITION OF SOVIET STRATEGY

A CENTURY OF CONFLICT. By Stefan T. Possony. Henry Regnery Company, 1953. 439 Pages; Index: \$7,50.

Here's a book that is not for burningat least not in countries this side of the Iron Curtain. For it is a much needed exploration of the formidable and devious Soviet pattern of conquest in all its manifestations. This pattern is extremely complex, for simplicity in strategic plans is not a fetish in Moscow. The Russian Communists understand thoroughly that warfare is never limited to conflict on the battlefield. They know that war will always be fought on diplomatic, psychological, economic, technological, as well as on military fronts. Russian strategy in the world conflict today is designed to use all these forces separately or concurrently, in varying degrees of relative intensity.

This country and its associates in the democratic world have paid an exorbitant price for their disregard of the all-embracing theory and practice of Russian grand strategy, and for their ignorance of Soviet intentions and techniques. Ignorance is no longer an excuse, for in this book Soviet strategy and intentions are disclosed thoroughly and effectively. Dr. Possony's analysis of the written and spoken words of Communist leaders and of the history of Communist action in Russia, China, and other countries, leaves no doubt as to past methods. From the record of the past, Dr. Possony deduces the principles of action that will inevitably animate the Russian leaders in their present conflict with the United States. Through his pages we begin to know our enemy better.

Dr. Possony is well equipped to explain Soviet strategic doctrine. He has a Ph.D. from the University of Vienna, and in the United States he has been associated with the Institute of Advanced Study at Princeton and with Georgetown University, where he is at present Professor of International Relations. As a recognized authority on geopolitics and military history, he has lectured at many of the Armed Forces colleges.

Under his guidance, we can avoid some of the mistakes that we have made in the past, due to our failure to appreciate the political and social aspects of modern war. The Russian military and political leaders are well aware of these factors and this has resulted in a unification of military and political strategy, to which they can certainly attribute much of their success.

According to Dr. Possony, Von Clausewitz is a major prophet in the Soviet religion of violence. Never for a moment do the Russians forget his famous dictum that, "War is the continuation of politics." Americans would do well to weigh carefully the author's comments on a book published in 1948 by Marshal Bulganin. Re-

ferring to the Marshal, Dr. Possony writes.

. . the principal mistake of bourgeois military leaders lies in their overstress of the strictly military aspects of war; at best, they are able to extend their thinking to a consideration of war potentials. Actually, according to him, war planning must cover the military, the economic, and the psychological fields, and operations must be correspondingly undertaken in all three spheres.

Bulganin is in favor of replacing the ill-defined German concept of total war with that of the politico-military war. Modern war, he believes, is both a national and a social conflict. Propaganda is a weapon as effective as conventional military measures. Political techniques can paralyze an army through destructive propaganda aiming at the annulment (rather than the annihilation) of hostile forces. Psychological warfare can be the major factor leading to the overthrow of the defeated nation's government and its replacement by a new regime socially and politically acceptable to the victor.'

This book undoubtedly oversimplifies the strategic and political principles of Marx and Engels, but it is noteworthy in showing how profoundly these laymen influenced the development of Communist strategy and revolutionary tactics. Lenin's theory of conquest and expansion is based on these initial Communistic principles, but shows important modifications of his own. Although we are accustomed to thinking of Communists as materialists, there is much evidence to show that Lenin never underestimated spiritual forces. He was, however, always seeking superior manpower as an indispensable element in Communist success, and for that reason a Communist revolution in the Orient was essential. In China this is a fait accompli, but Lenin's goal also contemplated a Communist India.

Stalin, according to Dr. Possony, "was one of the greatest military captains of history. This is a matter of record and the Western nations must recognise this fact. The reasons for this high estimate of Stalin's ability in war are well documented. Dr. Possony's analysis of Stalin's victory in the Danube Basin and the Balkans attributes much of that success to the skillful employment by Stalin of diplomatic and psychological warfare.

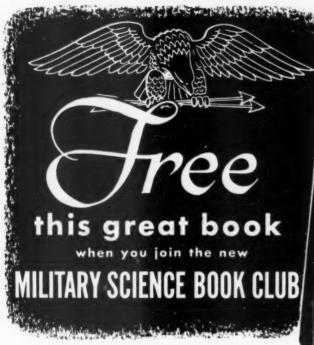
Revolutionary and strategic theory in Communist China are of particular interest to the United States. In considering Mao's military doctrine, Dr. Possony discovers that like Stalin, the Chinese leader counts on making war lucrative. The greatest novelty in Mao's teaching is the idea that war should be a paying business and that one should not hesitate to fight wars of attrition against superior forces. "This is a philosophy of guts which sometimes seems to have disappeared from western military and political thinking. If Mao or one of his disciples were to influence strongly the leadership of international Communism, the world could witness the boldest and most ambitious aggression of history. This aggression would not be launched for the sake of agrarian reform. but for world domination.'

The final chapter of the book should be required reading for all senior officers. In it Dr. Possony summarizes in an ingenious and brilliant synthesis the Soviet doctrine of conquest. It defines the fundamentals of the broadened concept of warfare that are so important for us to understand. There is particular interest for all military personnel in the changes the Russians have apparently made in the standard principles of war and the additions that they have devised to supplement them. It is extremely important that we understand the theory and practice of Soviet organization. We must bear in mind that the Soviet weapons of violence include fire power, infiltration, deception, and other devices. These revelations of the mind of our enemy will forearm us and will teach us the vital lesson that the military leaders of this nation will neglect the social forces of our time only at the greatest peril to our national security.-BRIG. GEN. DONALD ARMSTRONG.

STILL WANTED: A MODERN TEXT ON MILITARY LAW

MILITARY JUSTICE UNDER THE UNIFORM CODE. By James Snedeker, Brigadier General, United States Marine Corps, Retired. Boston: Little, Brown and Company, 1953. 1052 Pages; \$15.00.

When the second and last edition of Colonel William Winthrop's Military Law and Precedents was published, in 1896, the total number of officers and enlisted men in the Army, including those on the retired list, did not exceed 30,000 and they were governed by a set of Articles of War that, except for some patchwork amendments reflecting the needs of the Civil War, and a renumbering when the Revised Statutes were adopted in 1874, had not been changed since 1806. Since then the United States has fought four major conflicts and the number of persons subject to military law at any given time has risen to more than twelve million. The disciplinary laws governing the Army have been rewritten no less than four times, more drastically each time, the final one being the Uniform Code of Military Justice. That Code, with its extended appellate process capped by a civilian Court of Military Appeals, went into effect on 31 May 1951. And yet, until just the other day, Winthrop's second edition remained the only available text on military



Benefits You Enjoy as a Member

THE MILITARY SCIENCE BOOK CLUB was formed to make available, (often at savings up to 40% or more), the important books dealing with the world's most significant military operations of the past and present.

These books, by leading military and naval authorities, cover every branch of the services. They include works which describe, with first-hand clarity, the background data, the elements of arms and logistics, the brilliant strategy which affected the decisions and plans that have shaped world history throughout the ages.

They also include intimate biographies of the great generals and admirals who have had the greatest influence on international affairs. These are the books for which successful military men have always reserved a share of their reading time, in order to broaden their fields of vision and draw valuable analogies for future guidance.

Members have the advantage of being able to acquire, at moderate cost, superb and constantly growing libraries of the finest books which have been or will be written in this particular field.

Each month the Club's editors will select an outstanding book

This and other significant works in the same field will be described

in the Club Review which you receive Iree.
On joining, you receive DECISIVE BATTLES OF THE U. S. A. Iree with your first selection, THE MARSHALL STORY. For every four additional selections you accept, you receive a FREE Bonus Book.

You will not have to accept every selection - as few as four a year fulfills your sole membership obligation. You accept only the books you want, and pay the member's special reduced price, plus small fixed mailing charge, after receiving them. If you do not want a forthcoming selection, you simply return a printed form which is always supplied.

It costs nothing to join and you may cancel your membership at any time after accepting four selections. Send no money. Just mail coupon today.

Start your membership with



The Marshall Story

A Biography of Gen. George C. Marshall By ROBERT PAYNE

A provocative study of "the greatest Chief of Staff this country has ever had . . . a man who was oppressed by war and yet strove to bring himself to a pitch of mechanical perfection in the art of war . . . and who knows more about war than anybody else in his generation.'

Retail price \$5.00

To members, only \$4.00



Decisive Battles of the

By Major-General J. F. C. FULLER

Out of print for years, this famous classic has now been reprinted for members of the Military Science Book Club. An internationally known strategist gives an absorbing account of each of the 22 battles that affected American history from the Battle of Trenton to the Meuse-Argonne. The strategy of opposing armies is skillfully analyzed and each battle's historical consequences clearly traced. Brilliant synopses of each campaign and the intervening peace periods make this actually an indispensable military history of the United States. Illustrated with 29 maps and battle plans.

Retail price \$6.50

FREE to new members

Since the dawn of history, great military leaders have been ardent students of military science and tactics. Alexander, Caesar, Napoleon, Nelson, Washington, Lee, Grant, Pershing, Marshall, Eisenhower, Halsey, King, and all the others you could name — have been guided and influenced by military history — have kept themselves informed by intelligent reading.

JOIN NOW! WORTH OF BOOKS FOR ONLY

This	coupon	makes	you	0	membe	r with	all	privi	leg	les

MILITARY SCIENCE BOOK CLUB, Inc. Dept. 2007, 11 E. 36th St., New York 16, N. Y. Please enroll me as a member and ship me immediately DECISIVE BATTLES OF THE U. S. A. as my FREE membership gift, along with my first selection, THE MARSHALL STORY, at the member's special reduced price of \$4.00 plus 30c for postage and packing. I am to receive the Military Science Book Club Review FREE every month, and a FREE Bonus Book for each four additional selections I accept. I agree to accept as few as four selections during my first year of membership. law. In the opinion of General Bethel, a former Judge Advocate General of the Army, Winthrop was too far obsolete even after the 1920 changes for mere revision and amendment; it was already a classic by that time. And Winthrop will certainly not be replaced by General Snedeker's Military Justice Under the Uniform Code.

This work is spotty, inaccurate, and consequently disappointing. To dismiss it as being of little value would be easy, and quite accurate. But since it is the first substantial text on military law for over half a century, since it comes from the pen of a retired general officer and bears the imprint of a distinguished law publisher, the service is entitled to at least a partial bill of particulars—within space limitations—to supplement the foregoing indictment.

(1) General Snedeker had a splendid opportunity to assemble the pre-Uniform Code precedents of the three services, particularly the ones interpreting the punitive articles. Those precedents are still important today because of the extent to which the punitive articles of the UCMJ were taken directly from the AWs. Those precedents are in consequence still cited by the Court of Military Appeals. And yet they are largely inaccessible, and are practically unavailable outside of the largest headquarters. Snedeker, therefore, could have codified the law as to military offenses as it stood prior to 1951, but his book does not do this. It cites only scattered Army and Navy rulings, and none from the Air Force. General Snedeker did not research the hundred and forty-odd volumes of Board of Review opinions. A spot check reveals that he took most, and sometimes all, of his citations from the first edition of Philos, Manual of Court-Martial Lawand where Philos was completely wrong, Snedeker dutifully repeats the error. Philos, relying on rulings in the ETO, says that it is not misbehavior before the enemy for an airman to refuse to take off for a target many hundreds of miles away. Snedeker simply copies, citations and all. The reader of either book will not learn that The Judge Advocate General, when given the opportunity, disagreed with ETO, and held that such conduct was

(2) Snedeker is particularly weak in his extensive treatment of the general articles old AW 95 and AW 96, now articles 133 and 134, UCMI. This is a consequence of his failure to appreciate that before the Army was specifically given jurisdiction over peacetime felonies by AW 93 of 1916 and thereafter, it regularly prosecuted such offenses under the old general article, AW 62 of 1874. That practice was approved by the Supreme Court in the case of the sentry who fired at the assassin of President Garfield. Snedeker does not cite that case, and in consequence makes several incorrect statements as to the Army's pre-1916 jurisdiction to try civil felonies.

(3) There are strong libertarian overtones in the book, which would be less troubling if General Snedeker had been willing to share with the reader the facts of the decisions he discusses at length.

Reasonable men can differ with the Supreme Court's view of double jeopardy expresed in Wade v. Hunter, 336 U.S. 684. But there can be only one conclusion from the circumstance that, although critical of the case, General Snedeker nowhere sets forth its controlling facts, namely, that the charges were withdrawn from the first court-martial because, after an adjournment to enable the TJA to produce witnesses requested by the court, the division to which the personnel of the court belonged started on its final advance into Germany. Failure to mention these circumstances, despite frequent references to the decision, is, it is submitted, something less than candid.

(4) It is in his chapter on Constitutional Guarantees, however, that General Snedeker really lets himself go. He says:

"As late as 1911, it was quite generally denied by the executive branch of our government that the personal guarantees found in the Federal Constitution were applicable to our men in uniform. Subsequent to that time, it has been admitted that some of the guarantees are applicable. Since 1943, the judicial attitude of our federal courts towards the exercise of jurisdiction by courts-martial has become more parental, and some of the fundamental privileges of the man in uniform are being respected by the more enlightened jurists. . . . This somewhat more liberal attitude on the part of the courts has had the unfortunate effect, however, of delaying the day when Congress would be inclined to give to the armed forces a definitive set of guarantees applicable to the individuals of those forces. . . .

This quotation furnishes a fine starting point for a long and learned discussion. It will be sufficient, however, to point out that the applicability or otherwise of the Bill of Rights to military trials is hardly an issue of militarists versus civilian judges. The Court of Military Appeals has already twice held that the soldier's protection is statutory rather than constitutional, and the Supreme Court just the other day (Burns v. Wilson, decided 15 June 1953) arrived at the same conclusion. On this point, therefore, the highest civilian courts are as one with Colonel Winthrop and against General Snedeker.

(5) When a volume as large and expensive as the present one is offered as authority, it is the duty of reviewers to list demonstrable errors:

Snedeker says: "There seems a tendency of court-martial reviewing authorities to discount the influences, short of torture, at work in compelling confessions from subordinates." I checked this and quickly found five rulings, taken virtually at random, directly to the contrary. I could cite them if space were available. It is enough to say that there is simply no excuse for any such charge in a professional treatise. It was clearly the author's duty

to check the authorities.

Snedeker says: "The Army, during the last half of the nineteenth century, circumvented the operation of a statute prohibiting Regular Army officers from sitting in courts-martial for the trial of United States Volunteers by giving such officers an indefinite leave of absence from the Regular Army, and investing them with a commission in the Volunteers. This practice was condemned as clearly illegal [by the Courts]." Here the author betrays his ignorance of Army organizational history.

First, there were no Volunteers on duty in the Army between the end of the Civil War and the outbreak of the Spanish War. Next, when Volunteers were authorized during and after the latter war, Volunteer commissions were available for Regular officers. McClaughry v. Deming, 186 U.S. 49, settled the proposition that Regulars holding no other commission could not try Volunteers, but not until United States v. Brown, 206 U.S. 240-which went unargued for the Government-was it made clear that the disability attached to any officer of Volunteers who held a Regular commission in a lower grade. Finally, in 1908, far from being shocked by what the Army thought it had the right to do, Congress first permitted minority Regular membership on courts-martial for the trial of militiamen; and the next-and last-Volunteer legislation, in 1914, made any officer of any component eligible to sit in judgment on an accused of any component. And that has been the law ever since.

Is it unfair to suggest that an author should be on sounder ground before imputing ignoble motives to an entire armed force?

Snedeker says: "A command by a superior officer to an enlisted man to wait on table at an officers' mess is in contravention of [a law] which provides that 'no officer shall use an enlisted man as a servant in any case whatsoever.' This law is for the protection of the rights of enlisted men, and the command is illegal," citing a JAG opinion.

But the Judge Advocate General subsequently ruled that "it does not follow that compulsory KP duty in an officers' mess is at all times and under all circumstances violative of the statute. . . . The test to be applied . . . is . . . whether these services were to be performed in the capacity of a private servant to accomplish a necessary military purpose. At a remote island in the Pacific it may be as much an essential military need that officers be fed, as that gasoline be placed in airplanes and tanks, or that enlisted men be fed." Held, therefore, a lawful order to a soldier to serve on KP duty in an officers' mess. General Snedeker does not cite the later

And that isn't all. There are cases cited that had been reversed within the period covered by the book. There are many other little mistakes too detailed to be listed here. Some of them were pointed out by The JAG of the Air Force in the February

1953 issue of the Vanderbilt Law Review. I listed others in the June 1953 issue of the Journal of Legal Education, in a review on which a member of a service JAG school faculty—a genuinely learned military lawyer—commented as follows: "I could not conceive of a book of this type being so completely and thoroughly inaccurate. It annoyed me." And he proceeded to list nine additional errors.

Finally, it is to be noted that in all of General Snedeker's eleven hundred pages on Military Justice Under the Uniform Code the complete text of the Code no-

where appears.

Military law, therefore, awaits a 20th Century Winthrop. The field is open—wide open.—Col. Frederick Bernays Wiener.

EXCELLENT BATTLE NOVEL PATROL. By Fred Majdalany. Houghton Mifflin Company, 1953. 149 Pages; \$2.00.

Major Tim Sheldon, the central figure of *Patrol*, is British, and an infantry major. He commands a company, in defensive position in North Africa, at the time of the novel. At twenty-four he is an old man. He has been in combat too long, has borne the weight of command too long, has been wounded once, and seen too many men die.

Patrol covers only twenty-four hours, and in the first hour or so of the twenty-four Sheldon is ordered to furnish a patrol from his company to investigate a hot G2 tip that one of the main German positions in front of the battalion has been evacuated. Because one of his officers has led patrols the last two nights and the other has joined from a replacement pool in England, Sheldon decides to lead the patrol himself. (His company, you have probably gathered by now, is understrength.)

It is not particularly important to the action that the hot G2 tip is a figment of the imagination of an idiotic assistant G2 at division. However, Mr. Majdalany does give the impression that most patrols are similarly conceived although he probably doesn't mean to. Patrolling, as any commander knows, is a necessary, though difficult and dangerous part of ground warfare. On Mr. Majdalany's side, though, let it be said that far too many patrols are conceived in misinterpretation of evidence and dedicated to the proposition that it is justifiable to go to any length to keep troops in defensive positions from getting defensive minded.

It is pretty much in this frame of mind that Sheldon makes his reconnaissance, sets up the patrol plan, organizes the patrol and gets ready to lead it out. While he is doing this he is letting his mind run and you follow his army career—with a little prewar civilian life thrown in—pretty much in soliloquy form. This sort of thing can get out of hand, but Mr. Majdalany has had the wisdom to put in no more than he needs to fill in Sheldon's character and show you how he got to be a good officer on the thin edge of cracking up.

Sheldon leads his patrol out, draws fire from at least a battalion in the "abandoned" position, loses two men, is hit in the leg himself, and brings his patrol in with his information. On the way from battalion to brigade in the ambulance he dies, probably from shock, of a wound that probably wouldn't have bothered a man who wasn't completely used up.

Patrol is a tightly written novel by a man who is a full-time writer and critic, and who was a wartime combat infantryman. The combination is a particularly happy one. From a purely military point of view, he has given us as excellent and accurate an account of a patrol action as there is in military writing, whether fact or fiction. If that were all he had accomplished this would still be a valuable book.

But he has gone a great deal beyond reporting. Mr. Majdalany is one of a bare handful of contemporary writers who can get inside the soldier's mind and then write sensibly about what he finds there. Command in battle, whether of a squad or of an army, is one of the loneliest positions on earth, and seldom is the weight of command felt more heavily than by the man who must lead other men on a pitch black night to a spot he has seen only at a distance, discover what he has been sent to discover without wasting the lives of the men he leads, and then bring his patrol back as safely as the chance of war will allow.

Such a man is Tim Sheldon, and the fact that Mr. Majdalany has successfully illuminated for us the workings of his mind and the limitations of his endurance mark him as both a novelist of the first rank and a student of leadership and command whose opinions deserve careful study. Patrol, in short, deserves a place in the permanent literature of war.—ORVILLE C.

HISTORY OF HIGH PLANNING

STRATEGIC PLANNING FOR COALITION WAR-FARE, 1941-1942. By Maurice Matloff and Edwin M. Snell. Office of the Chief of Military History, Department of the Army. 398 Pages; Illustrated; Charts; Index; \$3.25.

This eighteenth volume in the Army's official history of World War II hardly sounds like the kind of a book that even the most dedicated professional soldier would select to take with him on a late-summer vacation. Nevertheless it has a certain fascination because here is what the authors call "organized information" on the development of our national strategic planning in the period when this country went from planning primarily for the defense of the Western Hemisphere to coalition warfare all over the world and then on to the beginnings of our present definite global commitments.

It is not necessary to belabor in a military journal the ever-present frustration of planners at all levels who must work long hours under pressure to have a plan ready in case various possible events take place, often to have a new command decision make all the effort valueless. As is clearly brought out in this volume the War Department General Staff had of necessity to plan for many eventualities, including the world-wide operations which finally developed, even as public opinion polls, statements of the President, and votes in Congress indicated the unwillingness of the nation to be drawn into another European war or even to prepare for such action if it should be forced upon us.

It is indicative of the experience now available in strategic planning at the top level that President Eisenhower and Generals Ridgway, Twining, and Hull appear, in more subordinate rolls than their present ones, in this book. Without sure knowledge of enemy intentions or indeed of American decisions under the pressure of future events, there was inevitably much disagreement among the planners. Maj. Gen. Orlando Ward, Chief of Military History at the time this book was prepared (he has been succeeded by Maj. Gen Albert Cowper Smith), says a valid word of warning in the foreword: "It may seem to the reader that controversy and differences of opinion are stressed and that agreement and cooperative endeavor are slighted. Since planners are occupied with unsettled problems, their work necessarily involves differences of opinion. It is only when all sides of an issue are forcefully presented and the various solutions thereof closely scrutinized that the final plan has any validity. The reader must bear in mind that the differences related herein are those among comrades in arms who in the end always made the adjustments required of the members of a team engaged in a common enterprise.'

That the final major decisions came, in accordance with American tradition and law, from the President is emphasized by a sentence in a memorandum from General Marshall to Mr. Roosevelt in the case of "Pacific Theater versus Bolero" (Bolero was the build-up of U.S. forces and supplies in the United Kingdom for the cross-Channel attack): "I present this question to you as Commander-in-Chief, and request that you discuss this matter with Admiral King, General Arnold and me, and give us a formal directive for our future guidance."

Another point that comes out clearly is the importance and difficulty of deciding when to make a decision. The problem is a major one at all levels from the Joint Chiefs down to an infantry squad. The Army's schools have long recognized this fact in the type of problem which has no stated requirements, but only presents a sequence of situations which the student must deal with not only as he sees fit but when he sees fit.

At the international level there is additional evidence, if any is needed, that decisions and plans cannot be solely based on military considerations; political, economic, and sentimental factors were always important, sometimes governing.

There are some dramatic incidents recorded. In April, 1941, the question of America's early entry into the war came up on the basis of General Marshall having to be prepared to recommend to the President what he should do, and the equally important question of whether or not the President should make a decision at that time. In a meeting with the planners, Marshall required each of the officers present to express his opinion. Colonel Mc-Narney (later General McNarney) answered ". . . that anything that would tend to cause the fall of the British Isles would tend to put the whole load on the United States. That it is important that we start reducing the war-making ability of Germany. We do have a Navy in being and we can do something. If we wait we will end up standing alone and internal disturbances may bring on communism. I may be called a fire-eater, but something must be done." Others present concurred in varying degrees, but Lt. Gen. Stanley D. Embick strongly disagreed. During the summer, the Army staffs undoubtedly influenced by the German attack on the Soviet Union, came around to General Embick's view. Pearl Harbor, of course, put the matter beyond any necessity for decision.

The reports and recommendations of Colonel (now Brigadier General) Bonner Fellers during the period covered are of particular interest in view of his recent controversial book, Wings for Peace. Fellers, in his capacity as U. S. military attaché in Cairo, "held a low opinion of British leadership and slight hopes of British prospects in the war in the desert His reputation as an observer was high enough to result in his being granted an interview with the President when he was recalled from Cairo. Earlier General Marshall had commented in a memorandum to the President: ". . . Fellers is a very valuable observer but his responsibilities are not those of a strategist and his views are in opposition to mine and those of the entire Operations Division."

This volume is a companion volume to Washington Command Post: The Operations Division, and a third volume, Strategic Planning for Coalition Warfare: 1943-1944, is in preparation. It is up to the usual high standard of the official Army histories. As a minor criticism, it might be stated that it is rather surprising that the authors go along with less qualified writers in using the term Afrika Korps as synonymous with the various designations which were actually assigned to the entire Italian German force in the North African desert.—MAJ. GEN. H. W. BLAKELEY.

HOW TO CARRY AMMO

THE POWDER FLASK BOOK. By Ray Riling. Robert Halter, Publisher. 496 Pages; Illustrated: \$25.

The words "monumental" and "exhaustive" are adjectives which book reviewers use with extreme caution as accolades not lightly to be granted. In the case of *The Powder Flask Book* by Ray Riling, how-

ever, there is no choice. It is both a monumental undertaking and an exhaustive treatment of the subject.

Very soon after the development of really portable firearms about the middle of the fifteenth century, man began to seek some means of conveniently carrying his ammunition upon his person. Many methods were tried. Buckets, bags and pockets were experimented with and abandoned along with other even less probable devices. Gradually there developed a container specifically designed for holding gunpowder. It was made of hard materials for convenient use, and it was tightly stopped to prevent the accidental firing of its contents. This was the powder flask, which was to remain in use for over 400 years until finally supplanted by the self-contained cartridge.

As the years wore on, the materials used for the construction of these flasks increased in variety. There was wood, jacked leather, horn, ivory, bone, gourds or nuts, and metals, both precious and base. Devices were added for measuring the proper charges of powder, and on the finer specimens, the surface decoration reached the realm of the fine arts.

These are the objects with which Mr. Riling has concerned himself in his giant volume. All types are adequately covered although his primary emphasis is placed on the die-stamped metal flasks of the nineteenth century. Every aspect of the flask is considered, its history, its use, the methods of its manufacture. There are chapters on the men who made flasks and on the various patents that have been taken out with reference to them. As an indication of the detail which is contained here, it might be mentioned there is an abridgement of every patent of which there is a record and, if they still exist, the original patent drawings are reproduced. Also all the known early catalogs of flask manufacturers are reprinted in their entirety, which is a great service to students since some of these rare books are known through only one existing copy.

For the collector as well as the student there are special features. The care and repair of flasks is discussed at some length with special drawings of tools and the methods of using them. There is a chapter on flask photography and there are many useful hints and much good advice on keeping records and on general procedures gained from many years of experience by the author. Also to the delight of the collector is a listing of the comparative values of over 1600 individual flasks, every one of which is illustrated in the book.

In addition to the material on powder flasks themselves, there is also much information on associated objects. One especially interesting and amusing section entitled "Caveat Emptor" discusses items which are frequently mistaken for powder flasks and which (although the author doesn't mention it), have even been exhibited as such in leading museums. These

COMBAT FORCES

ALL BOOKS LISTED HERE APE AVAIL-ABLE FOR PROMPT SHIPMENT

If you send cash with your order, we offer you an extra bonus of dividend coupons worth 15% of the cash you send. Please include with your payment for each order (cash or charge) 25¢ to cover postage and handling.

BOOKS ADDED TO STOCK

Conservat	ive !	Mind:	Burke	to	
Santay	ana	(Kirk)			\$6.50
Amazing	Mr.	Dool	ittle	Reynolds	3.95
A Windo	w on	Red	Square	Rounds	3.00

ORDER ALL YOUR
MAGAZINE SUBSCRIPTIONS
FROM

COMBAT FORCES BOOK SERVICE

ONE ORDER
ONE RENEWAL
ONE ADDRESS CHANGE
WHEN YOU MOVE
TAKES CARE OF
EVERYTHING
Send for FREE CATALOG

Modern Arms & Free Men (Vannevar	Chief of Staff: Prewar Plans &	MILITARY JUSTICE	Sexual Behavior in the Human Male
Bush) 3.50 Operation Sandstone Eniwetok (White) 3.50	Preparations 3.75 Washington Command Post (Operations	Manual for Courts-Martial, 1951 2.75	(Kinsey) 7.50 Sexual Behavior in the Human Female 8.00
Sourcebook on Atomic Energy	Division) 3.25 War Against Germany (Pictorial) 3.25	Military Justice Under the Uniform	Story of Maps (Brown) 8.50
(Glasstone) I 99	War Against Germany (Pictorial) 3.25 War Against Germany & Italy	Code (Snedeker) 15.00 Practical Manual of Martial Law	Survival 1.50
INTELLIGENCE & INVESTIGATION Cartridge Identification (Munhail & White)	(Pictorial)	(Wiener) 2.50 Uniform Code of Military Justice	GUNS, STATIONERY, ETC.
Vol. I Centerfire Metric Piatol &	War Against Japan 3.50 Transportation Corps Responsibilities 3.25	(Wiener) 3.50	Johnson Target Gun 6.95 Stik-tacks (Box) 1.00
Revolver Cartridges 7.50 Vol. II — Centerfire Amer. & British Pistol & Revolver Cartridges 7.50	The Persian Corridor & Aid to Bussia 3.50 Three Battles (Typical regimental	THE ARMY & ITS INSTITUTIONS	UNIT HISTORIES
Vol. I & Vol. II (if ordered together) 14.00	Approach to the Philippines 5.50	Beginnings of the U.S. Army (Jacoba) 5.00 Men of West Point (Dupuy) 5.00	Down Bamp (1st, 2d, 3d, 4th, 5th, 6th
Cryptography (Smith) 3.00 Front Line Intelligence (Robb&Chandler) 2.50	Stilwell's Mission to China 5.00	MILITARY WEAPONS	Spec Eng Brig) 5.00 First Cavelry Division 3.00
Intelligence Is for Commanders 3.85	The Quartermaster Corps (Vol. I) 3.25 History of U.S. Nava! Operations in	Book of the Garand (Maj. Gen. Hatcher) 6.00	Uncommon Valor (all Marine Div.) 2.50
Modern Criminal Investigation 4.75 Strategic Intelligence (Kent) 3.00	WWII (Samuel Ellot Morison) Battle of the Atlantic 6.09 Operations in N. African Waters 6.09	How to Shoet a Rifle	24 Engineer Special Releade 6 00
FICTION	Operations in N. African Waters 6.00	Small Arms of the World (W. II. B. Smith) 6.50	12th Inf. Regt. 7 50 Saga of the XX Ghost Corps 7 50 56th Fighter Group 10 00
The Caine Mutiny (Wouk) 3.95 Capt. Horatio Hornblower (C.S.Furester) 4.00	Rising Sun in the Pacific 6.00 Breaking the Bismarcks Barrier 6.00 Struggle for Guadalcanal 6.00	Weapons of World War II (Barnes) 7.50	28th Regiment 2.50
Commodore Hornblower (Forester) 3.00	Coral Sea, Midway & Submarine	SPORTING WEAPONS	120th Regiment 6.50 129th Regiment 5.00 305th Regiment 5.00
Farewell to Arms 3.00 Guard of Honor (Cozzens) 3.50	Actions 6.00 Aleutians, Gilberts and Marshalls 6.00	Gunsmithing Simplified (MacFarland) 695 Huntin' Gun (Rodgers) 3.50	363th Regiment Second to None 5.00 363d Regiment 5.00
Lieutenant Hornblower (Forester) 3.50 Lord Hornblower (Forester) 3.00	New Guines & Marianas 6.00 U.S. Marines in World War II	Story of Winchester10.00	376th Regiment 3.50 398th Regiment 5.00
Meiville Goodwin, U.S.A. (Marquand) 2.75 Mr. Midshipman Hornblower (Forester) 3.50	Battle for Tarawa 1.50 Bougainville & Northern Solomons 2.00	Why Not Load Your Own (Whelen) 3.50 Your Big Game Rifle (Stebbins) 5.00	400th Regiment 5.00
Red Badge of Courage (Craue) 1.25	The Guadalcanal Campaign 4.25	HUNTING & SPORTS	508th Regiment 5.00 3d Infantry Division 6.00
Song of Roland (Luquiens) 2.75 War and Peace (Tolator) 2.45	Saipan: Beginning of the End 3.25 Defense of Wake 1.25	Famous Running Horses (John F. Wall 10.00	6th Infantry Division 5.00 11th Airborne Division The Angels 6.00
BIOGRAPHY	Assault on Peleliu 2.50 Seizure on Tintan 2.50	How to Be a Consistent Winner at the Most Popular Card Games (John	24th Inf Div Children of Yesterday 3.00 27th Infantry Division 10.00
Abraham Lincoln (Hen), P. Thomas) 5.75	Marine Aviation in the Philippines 2 50 Campaigns of New Britain 3.75	Crawford Doubleday) 2.95 Hunter's Encyclopedia (Camp)	29th Infantry Division-29 Let's Gol. 5.00
Alexander of Macedon (Harold Lamb) 3.75 Bedford Forrest (Lytle) 4.00	Marines in the Central Solomons 2.75		30th Infantry Division 4.00 33d Infantry Division Golden Cross 7.50
Captain Sam Grant (Lloyd Lewis) 6.00 Douglas MacArthur (Lee & Henschell) 8.00	Life's Picture Hist, of W.W.ii10.00 This is Pearl (Millis) 4.00	DICTIONARIES, ATLASES, ETC.	37th Infantry Division 7.50
Eigenhower: Soldier of Democracy	High Command	American College Dictionary Plain 5.00	71st Infantry Division 1.50 78th Infantry Division 5.00
(Davis) 3.49 Genghis Khan (Lamb) 3.50	Calculated Risk (Mark W. Clark) 5.00 Crusade In Europe (Eisenhower) 2.98	American Everyday Dictionary	77th Inf Div-Ours To Held It High 6.00
Vol. I & 11	Fleet Admiral King (King & Whitehili) 7.50 The Forrestal Diaries	American Vest Pecket Dictionary	83d Inf Div—Thunderbolt Across Europe 8.50
Vol. 111 & IV	On Active Service (Stimson) 5.00 Second World War (Winston S. Churchill)	Conde's School Atles	84th Inf Div Battle of Germany 5.00
All 5 vol. (boxed)35.00	The Gathering Storm 6.00	Goode's School Atlas 5.75 Roget's Thesaurus (Revised)	85th Infantry Division 5.00 89th Infantry Division 5.00
Napoleon (Ludwig) 1.25 Robert E. Lee (Freeman) 4 vol. 25.00 Rommel: The Desert Fox (Brig. Young) 3.50	Their Finest Hour 6.00 The Grand Alliance 6.00	Thumb indexed 5.00	91st Infantry Division 5.00 94th Infantry Division 5.00
Rommel: The Desert Fox (Brig. Young) 3.50 Sherman: Fighting Prophet (Lloyd Lewis) 5.60	Ifinge of Fate		96th Bignal Communique 1.25 101st AB Div—Rendezvous With Destiny 7.50
Stonewall Jackson (G. F. R. Henderson) 6.00 Winston Churchill (Cowles) 5.06	A Soldier's Story (Omar N. Bradley) 5.00 War As I Knew It (George S. Patten) 4.50	Pocket Dictionary 1.35 Talking Russian Before You Know It 1.75 Thorndike-Barnhart Comprehensive	101st Airborne Division Fold of 2.50 104th Inf Div Timberwolf Tracks 4.00
LEADERSHIP & PSYCHOLOGY	War Reports (Marshall, King, Arnold), 7.50	Deck Dictionary	106th Inf Div—Lien in the Way 5.00 Americal Division 6.00
Managing Men (Kraines) 2 00	The War in Europe Bastogne (S. L. A. Marshall) 3.06	Plain 2.95 Thumb Indexed 3.50 Deluxe (flexible binding) 3.95	442d Combat Team Americans 5.00
Medal of Honor (Army) 4.50 Men Against Fire (S. L. A. Marshall) 2.75	Anzio Beachhead	Deluxe (flexible binding) 3.95 Webster's Geographical Dictionary 8.50	First Special Service Force 5.00 lat Marine Division 6.50 2d Marine Division—Follow Mel 6.00
Psychology for the Fighting Man 1.50	Omaha Beachhead	Webster's Collegiate Dictionary 6.00	2d Marine Division—Follow Mel 6.00 3d Marine Division
THE STAFF AND LOGISTICS	Small Unit Actions 1.25 The Struggle for Europe (Wilmot) 5.00	PRACTICAL SCIENCE	
(See also INTELLIGENCE and MILITARY HISTORY)	To Bizerte with II Corps	Art of Clear Thinking (Flesch) 2.75	5th Marine Division—The Spearhead 6.50 6th Marine Division 5.60 9th Marines—Striking Ninth 5.00
American Military Government (Holborn) 3.50 Military Management for National	Volturno 40 Winter Line 35	Art of Plain Talk (Flesch) 2.50 Art of Readable Writing (Flesch) 3.66 Mathematics for the Millions 5.95	5th Army Salerno to the Alps 6.00 9th Army Conquer 4.50
Defense (Beishline) # 66	War in the Pacific	Mathematics for the Millions 5.95	9th Army-Conquer 4.50
Military Staff Its History and Development (Hittle) 3.75	Capture of Attu (S. L. A. Marshall) 2.00	OPDER	FORM
National Security & the General Staff (Mai Gen Nelson) 5 55	Capture of Makin .35 Hard Way Home (Braly) [PW		
Soldier's Load & the Mobility of a Nation (S. L. A. Marshall)1.00	History of Marine Corps Aviation in	1400 104 0. 1144	S BOOK SERVICE
	WWII (Rob't Sherrod) 6.50		, Washington 6, D. C.
Cloth 2.50		N N 1	
	Island Victory (S. L. A. Marshall) 2.00 Small Unit Actions 1.25	Name	***************
AMERICA'S WARS	Small Unit Actions 1.25 Uncommon Valor (Brief histories of the six Marine divisions) 3.00		,
AMERICA'S WARS Revolutionary War	on Marine divisions) 3.00 Amphibious War	Street Address	
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50	Cheommon Vator (Brief histories of the six Marine divisions) 2.00 Amphibious War Down Ramp (Heavey) 5.00 U.S. Marines & Amphib. War (Crow)	Street Address	····· i
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (RBI)	Uncommon valor (Brief histories of the six Marine divisions) 3.00 Amphibious War Down Bamp (Heatey) 5.00 U.S. Marines & Amphib, War (Crowl & Isely) 7.50	Street Address Town or APO	Zone State
AMERICA'S WARS Revolutionary War Appeal to Arms (Waliace) 4.50 Valley Forge: The Making of an Army (1811) 3.50 War of the Revolution (Ward) 15.00	Uncommon valor (first histories of the six Marine divisions) Amphibieus War Down Ramp (Hessey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy	Street Address Town or APO	Zone State
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) Valley Forge: The Making of an Army (Bill) So War of the Revolution (Ward) War of 1812	Uncommon valor (Strief histories of the six Marine divisions) Amphibieus War Down Ramp (Heasey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50	Street Address	Zone State
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 1.50 War of 1812 War of 1812 (Adams) 3.00	Uncommon Vaior (Strief histories of the six Marine divisions) 3.00 Amphibious War Down Ramp (Heasey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA	Street Address Town or APO 1 enclose *\$ Please charge my account Send bill to Company F	Zone State Send COD
AMERICA'S WARS Revolutionary War Appeal to Arma (Wallace) 4.50 Valley Forge: The Making of an Army (1811) 2.50 War of the Revolution (Ward) 15.00 War of 1812 (Adams) 3.00 The Civil War	Uncommon Vaior (Strief histories of the six Marine divisions) 3.00 Amphibious War Down Ramp (Heasey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO	Zone State Send COD t und UR TOTAL PAYMENT TO
AMERICA'S WARS Revolutionary War Appeal to Arma (Wallace) Valley Forge: The Making of an Army (Bill) War of the Revolution (Ward) War of 1812 War of 1812 (Adams) The Civil War The Blue and the Gray (2 vol.) Mr. Lincoin's Army (Catton) 4.00 4.00 4.00 Mr. Lincoin's Army (Catton) 4.00 4.00 4.00	Uncommon valor (first histories of the six Marine divisions) 3.06	Street Address Town or APO 1 enclose *\$	Zone State Send COD t und UR TOTAL PAYMENT TO ND SHIPPING CHARGES.
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 1.500 War of 1812 (Adams) 2.00 The Civil War The Blue and the Gray (2 vol.) 1.2 60 Mr. Lincoln's Army (Catton) 4.00 Glovy Road Frederickshurg to 4.00	Checommon Valor (Erief histories of the six Marine divisions) 3.00	Street Address Town or APO I enclose *\$	Zone State Send COD t und UR TOTAL PAYMENT TO ND SHIPPING CHARGES.
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 15.00 War of 1812 (Adams) 3.00 The Civil War The Blue and the Gray (2 vol.) 12.00 Mr. Lincoln's Army (Catton) 4.00 Gloty Road Fredericksburg to Getty-burg (Catton) 4.50 Lee's Lieutenants (Freeman) 3. Vol. each 1.50 boxed set 22.50	Uncommon Vaior (Brief histories of the six Marine divisions) 3.00 Amphibious War Down Ramp (Heavey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas. & Eugene Jones) 7.50 River & the Gauntlet (S.L.A. Marshail) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele)	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following by	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. poks:
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 1.500 War of 1812 (Adams) 2.00 The Civil War The Blue and the Gray (2 vol.) 1.2 60 Mr. Lincoin's Army (Catton) 4.00 Glory Road Frederican 4.50 Getty-burg (Catton) 4.50 Lee's Lieutenants (Freeman) 3. Vol., each 7.50; buzed set 22.50 Life of Billy Yank (Beil I. Wiley: 6.00	Uncommon Vaior (Srief histories of the six Marine divisions) 3.00 Amphibious War Down Ramp (Heavey) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas & Eugene Jones) [Text & Piz] 5.00 River & the Gauntlet (S. L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) 6.00 Cassar's War Commentaries 6.165	Street Address Town or APO 1 enclose *\$ Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following by	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES.
### AMERICA'S WARS Revolutionary War	Doommon Valor (Strief histories of the six Marine divisions) 3.06	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. poks:
AMERICA'S WARS Revolutionary War Appeal to Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 15.00 War of 1812 (Adams) 2.00 The Civil War The Blue and the Gray (2 vol.) 12.00 Mr. Lincoln's Army (Catton) 4.00 Glory Road Forest Problem 10.00 Getty-burg (Catton) 4.50 Lee's Lieutenauts (Freeman) 3. Vol., each 7.50; hozed set 22.50 Life of Johnny Reb (Wiley) 6.00 Lincoln Fluds a General (Kenneth Williams) Vol. 1 & II 1.500	Uncommon valor (Brief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas & Eugene Jones) (Text & Piz) River & the Gauntlet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) 6.00 Caesar's War Commentaries 6.00 Caesar's War Commentaries 6.00 Caesar's Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Fiftcen Decisive Battlet (Creasy) 1.65 Fiftcen Decisive Battlet (Creasy) 1.65	Street Address Town or APO I enclose *\$	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
AMERICA'S WARS Revolutionary War Appeals Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 1.500 War of 1812 (Adams) 2.00 The Civil War The Blue and the Gray (2 vol.) 12.80 Mr. Lincoln's Army (Catton) 4.00 Glory Road, Fredericksburg to Color Road, Fredericksburg to Loc's Lieutenants (Fredman) 3. Vol., each 7.50, hoxed set 22.50 Life of Johnny Reb (Wiley) 6.00 Life of Johnny Reb (Wiley) 6.00 Lincoln Finds a General (Kenneth Williams) Vol. 1 & II 1.500 Vol. 1 & II 1.500 Vol. 1 & II 1.500	Uncommon valor (Brief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea Face of War (Chas & Eugene Jones) (Test & Piz) River & the Gauntlet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Test) 6.00 Caesar's War Commentaries 6.00 Caesar's War Commentaries 1.65 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Fifteen Decisive Battlets (Creasy) 1.65 Letters of Private Wheeler	Street Address Town or APO 1 enclose *\$. Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following by	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. poks:
AMERICA'S WARS Revolutionary War Appeals Arms (Wallace) 4.50 Valley Forge: The Making of an Army (Bill) 2.50 War of the Revolution (Ward) 1.500 War of 1812 (Adams) 2.00 The Civil War The Blue and the Gray (2 vol.) 12.90 Mr. Lincoln's Army (Catton) 4.00 Gotty-Abourge (Catton) 4.50 Gotty-Abourge (Catton) 5.00 Life of Blilly Yank (Heil I. Wiley) 6.00 Life of Johnny Reb (Wiley) 6.00 Lincoln Finds a General (Kunneth Williams) vol. 1 & 11 Vol. 1 & 11 Personal Memoirs of U. 8. Grant (New, annotated ellition) 5.00 Divided We Fought (Donald)	Uncommon valor (Srief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea Face of War (Chas & Eugene Jones) (Test & Pix) River & the Gauntlet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Test) 6.00 Caesar's War Commentaries 6.00 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Fiftcen Declive Battlet (Creasy) 1.65 Letters of Private Wheeler 3.75 War through the Ages (Montros) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00	Street Address Town or APO 1 enclose *\$ Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
### AMERICA'S WARS Revolutionary War	Common valor (Srief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy) U.S. Marines & Amphib. War (Crowl & Isely) The Enemy Panzer Leader (Guderian) Toe Enemy Panzer Leader (Guderian) ROREA Bill Mauldin in Korea Face of War (Chas & Eugene Jones) (Text & Pix) River & the Gauntlet (S.L.A. Marshall) 5.80 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) Caesar's War Commentaries Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 245 Fifteen Declive Battlet (Creasy) 1.65 Letters of Private Wheeler 3.75 War through the Ages (Montros) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCPIES OF WAR Alrborne Warfare (Mai Gen, Garin) 3.00	Street Address Town or APO I enclose *\$. Please charge my accounty Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
### AMERICA'S WARS Revolutionary War	Doommon Valor (Brief histories of the six Marine divisions) 3.06	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibious War Lown Ramp (Heavy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 ROPE ROPE CONTROL OF THE ENEMY BILL Mauldin in Korea 2.95 Face of War (Chas. & Eugene Jones) (Text & Piz] 5.00 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 6.00 Caesar's War Commentaries 6.00 Caesar's War Commentaries 1.65 Editiers of Private Wheeler 3.75 War through the Ages (Montros) 7.50 Warfare (Spaudding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfare (Ma), Gen. Garin) 3.00 Battle Studies (Upres) 2.75 Defense of the West (Liddell Hart) 4.00 Maridine Warfare (M.E. C. Fuller) 4.00 Maridine Marfare (E. C. Fuller) 2.50 Maridar Warfare (E. C. Fuller) 4.00 Mardine Warfare (E. C. Fuller) 2.50	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. books:
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibious War Lown Ramp (Heavy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 ROBERT Leader (Guderian) 8.00 ROBERT Leader (Guderian) 8.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 6.00 Cassar's War Commentation 8.00 Fifteen Decisive Battles (Creas) 1.65 Letters of Private Wheeler 1.57 War through the Ages (Montros) 7.50 Warfare (Spaudding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfare (Ma) Gen. Gavin) 3.00 Battle Studies (Upres) 2.75 Defense of the West (Liddell Hart) 4.60 Machins Warfare (J. C. Fuller) 2.50 Makers of Modern Strategy (Earle) 7.50	Street Address Town or APO I enclose *\$. Please charge my account Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibious War Lown Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas. & Eugene Jones) 7.50 (Text & Piz] 5.00 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Caesar's War Commentaries 1.50 Ectime & Fall of the Roman Empire 7.50 Fifteen Declare Steele (Nontros) 1.50 Ectimes of Private Wheeler 1.53 War through the Ages (Montros) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfars (Ma), Gen. Gavin) 3.00 Battle Studies (DuPice) 2.75 Defense of the West (Liddell Hart) 4.00 Marine Warfars (J.F. C. Fuller) 2.50 Malan on Sea Power Makers of Modern Strategy (Earle) 7.50 Military Institutions of the Romans 1.50 Apoplesion's Memoirs 7.50 Military Institutions of the Romans 1.50 Apoplesion's Memoirs 7.50 Applesion's Memoirs 7.50 Applesion's Memoirs 7.50 Applesion's Memoirs 7.50 Applesion's Memoirs 7.50	Street Address Town or APO 1 enclose *\$. Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. books:
## AMERICA'S WARS Revolutionary War	Cocommon valor (Srief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy): 5.00 U.S. Marines & Amphib. War (Crowl & Isely) The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea Face of War (Chas & Eugene Jones) (Text & Piz) River & the Gauntiet (S.L.A. Marshail) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) 6.00 Caesar's War Commentaries 1.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Fifteen Declive Battles (Creasy) 1.55 Letters of Private Wheeler 3.75 War through the Ages (Montross) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Alrborne Warfare (Ms.) Gen. Gavin) 3.00 Battle Studies (DuPicq) 2.75 Defense of the West (Liddell Hart) 4.00 Maciline Warfare (Ms.) Gen. Gavin) 3.00 Makers of Modern Strategy (Earle) 7.50 Mahan on See Power (Earle) 7.50 Makers of Modern Strategy (Earle) 7.50 Makers of Modern Strategy (Earle) 7.50 Military Institutions of the Bonnan 1.50 Napoleon's Memoirs 7.50 On War (Clausewitz) 3.50 On War (Clausewitz) 3.50	Street Address Town or APO 1 enclose *\$. Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following be	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. books:
## AMERICA'S WARS Revolutionary War	Cocommon valor (Srief histories of the six Marine divisions) Amphibieus War Lown Ramp (Heavsy): 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chan & Eugene Jones) (Text & Piz) Hiter & the Gauntiet (S.L.A. Marshail) 5.80 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Losear's War Commentaries 1.60 Locine & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 3.15 Var through the Ages (Montross) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfare (Ma). Gen. Garin) 3.00 Battle Studies (DuPics) 2.50 Malain on Sea Power (Sarley (Earle) 7.50 Malian on Sea Power (Sarley (Earle) 7.50 Malilitary institutions of the Bounans 1.50 Napoleon's Memoirs 7.50 Napoleon's Memoirs 7.50 Crease of the Post (Clausewitz) 3.00 Retreties on the Art of War (Pesaxe) 2.00 Ritteries of the Post of the Source 3.50 Ritteries of the Post of the Bounans 1.50 Napoleon's Memoirs 7.50 On War (Clausewitz) 3.50 Retreties of the Post of Postony) 5.00 Ritteries of the Postony 5.00 Ritterie	Street Address Town or APO 1 enclose *\$. Please charge my accounts Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AT Please send the following b	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
## AMERICA'S WARS Revolutionary War	Cocommon valor (Srief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy): 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas & Eugene Jones) (Text & Piz) River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) 6.00 Caesar's War Commentaries 1.65 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Fifteen Declive Battlets (Creasy) 1.65 Letters of Private Wheeler 3.75 War through the Ages (Montross) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Alrborns Warfare (Ms. Gen. Gavin) 3.00 Battle Studies (DuPicq) 2.75 Mahan on Sea Power (Earle) 7.50 Military Institutions of the Bounas 1.50 Napoleon's Memoirs 7.50 On War (Clausewitz) 3.50 Reveries on the Art of War (DeSaze) 2.00 War and Civilization (Toynbee) 2.50	Street Address Town or APO I enclose *\$. Please charge my accounty Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks:
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibious War Lown Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas. & Eugene Jones) 7.50 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Caesar's War Commentaries 6.00 Caesar's War Commentaries 7.50 Edition 5.00 (Untrues, each volume. 2.45 Edition of Frivate Wheeler 1.50 War fare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfars (Ma), Gen. Gavin) 3.00 Battle Studies (DuPres) 2.75 Defense of the West (Lidden) 4.75 Marina (Warfars U.F. C. Fuller) 2.75 Marina on Sea Power Marina (Ma), Gen. Gavin) 3.00 Marina on Sea Power Marina (Ma), Gen. Gavin) 3.00 Marina on Sea Power Marina (Ma), Gen. Gavin) 3.00 Marina on Sea Power (Marina) 3.75 On War (Clausewitz) 8.75 On War (Clausewitz) 8.75 On War (Clausewitz) 8.00 GENERAL HISTORY	Street Address Town or APO I enclose *\$. Please charge my accounty Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. books: VIDEND COUPONS. If you remit with your shipment a bonus of
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibious War Lown Ramp (Heavey) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas. & Eugene Jones) 7.50 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Caesar's War Commentaries 6.00 Caesar's War Commentaries 7.50 Editer of Private Witter (Cressy) 3.75 War through the Ages (Montros) 7.50 Warfare (Spaulding, Nickersun & Wright) 5.00 STRATEGY & PRINCIPLES OF WAR Airborne Warfars (Maj. Gen. Gavin) 3.00 Battle Studies (Duffect) 4.00 Machine Warfare (Lidden Har) 4.00 Machine Warfare (Lidden Har) 4.00 Malan on Sea Power Makers of Modern Strategy (Earle) 7.50 Military institutions of the Roman 1.50 Napoleon's Memoirs 7.50 On War (Clausewitz) 8.00 Reveries on the Art of War (DeSaze) 2.00 Ritaregic Air Power (Possony) 5.00 War and Civilization (Torphise) 2.50 GENERAL HISTORY Across the Wide Missouri (DeVoto) 1.00 The Course of Empire (DeVoto) 1.00	Street Address Town or APO I enclose *\$. Please charge my accounting Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be *SAVE 15 % WITH BOOK DI with this order, we will includ FIFTEEN PER CENT of the cash	Zone State Send COD tund UR TOTAL PAYMENT TO ND SHIPPING CHARGES. pooks: VIDEND COUPONS. If you remit e with your shipment a bonus of emitted in Book Dividend Coupons,
## AMERICA'S WARS Revolutionary War	Cocommon valor (Srief histories of the six Marine divisions) Amphibieus War Down Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 KOREA Bill Mauldin in Korea 2.95 Face of War (Chas & Eugene Jones) (Text & Pix) River & the Gauntlet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) Vol. 1 (Text) 6.00 Caesar's War Commentaries 1.65 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 2.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 3.75 Exteters of Private Wheeler 3.75 War through the Ages (Montross) 7.50 War through the Ages (Montross) 7.50 Warfare (Spaulding, Nickerson & Wright) 5.00 STRATEGY & PRINCIPES OF WAR Airborns Warfare (Ms. Gen. Gavin) 2.00 Battle Studies (DuPicq) 2.75 Defense of the West (Liddell Hart) 4.00 Machine Warfare (Ms. Gen. Gavin) 3.50 Makars of Modern Strategy (Earle) 7.50 Mahan on See Power (Earle) 7.50 Mahan on See Power (Sarle) 7.50 Military institutions of the Bonnan 1.50 Napoleon's Memoirs 7.50 On War (Clausewitz) 3.50 Reveries on the Art of War (DeSaxe) 2.00 War and Civilization (Toynbee) 2.50 GENERAL HISTORY Across the Wide Missourt (DeVoto) 1.000 The Course of Empire (DeVoto) 6.00	Street Address Town or APO I enclose *\$. Please charge my accounting Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be *SAVE 15 % WITH BOOK DI with this order, we will includ FIFTEEN PER CENT of the cash which can be used to purchast expiration stamped on each col	VIDEND COUPONS. If you remit e with your shipment a bonus of emitted in Book Dividend Coupons, e more books up to the time of topon. (Coupons cannot be given
## AMERICA'S WARS Revolutionary War	Uncommon valor (first histories of the six Marine divisions) Amphibieus War Lown Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 The Enemy Panzer Leader (Guderian) 7.50 River & General State of War (Chas. & Eugene Jones) (Text & Piz] 5.00 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Caesar's War Commentaries 1.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 1.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 1.45 Letters of Private Wheeler 1.75 Warfare (Spauding, Nickerson & Wright) 5.00 STRAIEGY & PRINCPLES OF WAR Airborne Warfare (Ma). Gen. Gavin) 3.00 Battle Studies (DuPicy) 2.75 Defisme of the West (Liddell Hart) 4.00 Machine Warfare (J. F. C. Fuller) 2.00 Military institutions of the Roman 1.55 On War (Clausewitz) 2.50 Martagel Air Power (Possony) 5.00 War and Civilization (Torphee) 2.50 Revertes on the Art of War (DeSaze) 2.00 Retarging Air Power (Possony) 5.00 War and Civilization (Torphee) 2.50 Ceneral Markers of March (DeVoto) 1.00 Energogedia of Amer. History 6.00 Life's Picture History of Western Man. 1.00 Shorter Cambridge Medieval History 6.00 Life's Picture History of Western Man. 1.00 Shorter Cambridge Medieval History 6.00 Life's Picture History of Western Man. 1.00	Street Address Town or APO I enclose *\$. Please charge my accounting Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be *SAVE 15 % WITH BOOK DI with this order, we will includ FIFTEEN PER CENT of the cash which can be used to purchast expiration stamped on each co- on orders for organizations.)	Zone State
## Appeal to Arms (Wallaces 4.50	Uncommon valor (first histories of the six Marine divisions) Amphibieus War Lown Ramp (Heavsy) 5.00 U.S. Marines & Amphib. War (Crowl & Isely) 7.50 The Enemy Panzer Leader (Guderian) 7.50 The Enemy Panzer Leader (Guderian) 7.50 River & General State of War (Chas. & Eugene Jones) (Text & Piz] 5.00 River & the Gauntiet (S.L.A. Marshall) 5.00 GENERAL MILITARY HISTORY American Campaigns (Steele) 5.00 Caesar's War Commentaries 1.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 1.45 Decline & Fall of the Roman Empire (Gibbon) 3 Volumes, each volume. 1.45 Letters of Private Wheeler 1.75 Warfare (Spauding, Nickerson & Wright) 5.00 STRAIEGY & PRINCPLES OF WAR Airborne Warfare (Ma). Gen. Gavin) 3.00 Battle Studies (DuPicy) 2.75 Defisme of the West (Liddell Hart) 4.00 Machine Warfare (J. F. C. Fuller) 2.00 Military institutions of the Roman 1.55 On War (Clausewitz) 2.50 Martagel Air Power (Possony) 5.00 War and Civilization (Torphee) 2.50 Revertes on the Art of War (DeSaze) 2.00 Retarging Air Power (Possony) 5.00 War and Civilization (Torphee) 2.50 Ceneral Markers of March (DeVoto) 1.00 Energogedia of Amer. History 6.00 Life's Picture History of Western Man. 1.00 Shorter Cambridge Medieval History 6.00 Life's Picture History of Western Man. 1.00 Shorter Cambridge Medieval History 6.00 Life's Picture History of Western Man. 1.00	Street Address Town or APO I enclose *\$. Please charge my accounting Send bill to Company F PLEASE ADD 25¢ TO YO COVER HANDLING AN Please send the following be *SAVE 15 % WITH BOOK DI with this order, we will includ FIFTEEN PER CENT of the cash which can be used to purchast expiration stamped on each co- on orders for organizations.)	VIDEND COUPONS. If you remit e with your shipment a bonus of emitted in Book Dividend Coupons, e more books up to the time of topon. (Coupons cannot be given

r, - h ir or d

2.45 3.75 3.00 4.00 8.50 4.50 include snuff bottles, patent oilers, sanders, dram flasks, and purely decorative objects. Then there are sections on related appendages such as shot pouches, chargers, and bullet moulds. And finally a chapter on the cartridge which supplanted the flask and rendered it completely obsolete.

This volume is beautifully designed and printed. The plates, which number several hundred in all, are clear and sharp. The original drawings made especially for the book by John Kerr are excellent and so much in keeping with the other illustrations in the sections in which they appear that they are frequently mistaken for reproductions of contemporary drawings.

It should be said that this reviewer prepared the first chapter, "The Flask Through the Ages," and that therefore all comment on it is omitted here. He had nothing whatsoever to do with the rest of the book, however, and, in fact, did not see it until it appeared in print.—HAROLD L. PETERSON.

FLAG BOOKS

- FLAGS OF THE WORLD. Edited by H. Gresham Carr, F.R.G.S. With 300 flags in colour and numerous text drawings. Frederick Warne & Co. Ltd., London and New York, 1953. 209 Pages; \$10.00.
- THE BOOK OF FLAGS. By Vice-Admiral Gordon Campbell, U.C., D.S.O., and I. O. Evans, F.R.G.S. Second Edition. Geoffrey Cumberlege: Oxford University Press, 1953. 116 Pages; \$3.50.

So far as the flag enthusist is concerned, books about flags are like bottles of whiskey: all are good, but some are better than others.

These two recent works are both in the "very good" class, for coverage, illustrations, and up-to-dateness. Written and published in England, British flags are naturally emphasized, with full treatment of government flags and of the Royal Standard through its mutations over the centuries. The same approach is doubtless responsible for the few slips concerning American flags which have crept into both volumes.

Mr. Carr's book has a few more colored pictures, but the scope of each is about the same, so that dollar for dollar the smaller work by Admiral Campbell and Mr. Evans is probably the better buy.

What this reviewer would like to see, frankly, would be a more comprehensive work, on the order of the National Geographic Magazine's flag numbers of 1917 and 1934, but expanded to show every Army flag now included in SR 840-10-1 (successor to our old friend, AR 260-10), plus every Navy, Air Force, Marine Corps and Coast Guard flag as well. That would be a real flag book!—F. B. w.

GUNFIGHTERS CLASSIC

TRIGGERNOMETRY: A Gallery of Gunfighters. By Eugene Cunningham. The Caxton Printers Ltd. 441 Pages; Illustrated; \$5.00.

This is the sixth printing of a book that first appeared in 1941, and it's not at all difficult to see why it has become a standard item of Western Americana.

It may be hard to believe that the men

whose short biographies appear here were actual people. There are stories of cold courage, blood lust and human endurance that make Chicago gangster stories seem pale in comparison. John Wesley Hardin, a youth with forty notches on his pistol, was as different from Ranger Captain John R. Hughes as any two men could be—but they both made their fame with handguns. Dallas Stoudenmire was a courageous and efficient town marshal; he could handle any number of wild gunmen but he was not nearly as efficient when he met a bottle of the local red-eye.

There are seventeen biographies in the book, all of Western "bad men" and "good men," to steal a phrase from the neighborhood television fans, except General Lee Christmas's story. Christmas performed his deeds in Central America. It is not too easy, in a few of Mr. Cunningham's chapters, to decide whether the subjects were "bad" or "good," and several others seemed to fit both categories at different times.

For something different than the usual, or even the unusual, Western story, try this literate recounting of stirring history.—A.S.

LIZZIE'S GOLDEN ANNIVERSARY

FORD AT FIFTY. Simon & Schuster. 108 Pages; Illustrated in color; \$2.95.

As a commemorative of the fiftieth anniversary of the founding of the Ford Motor Company, the company determined to produce a pictorial history of the Ford Motor Company. The result is a beautiful, short volume of high interest. About two-thirds of the book is devoted to excellent photographs, many in full color, and the remaining third is descriptive text. Obviously no expense has been spared to make this book worthy of the occasion for which it was issued.

The story of the company's start and development under Henry Ford is briefly told and well-illustrated. Quite properly, the main emphasis focuses on the present day operations of the firm. This is in no sense a fancy report for stockholders but really a book of merit in its own right.

The graphic descriptions of the intricacies of the production line are excellent and sure to absorb the interest of any car owner. Likewise, the experimental models will catch the eye of gadget-loving Americans.

The Ford Motor Company, as one of the foremost of our industrial giants, occupies a special niche in Americana partially because of the well-known Horatio Alger story of its founder. There's ample evidence in this handsome volume that the company is continuing its progress under the current generation in the same fine tradition.—R.F.C.

BOOKS RECEIVED

MINERALS—A KEY TO SOVIET POWER. By Demitri B. Shimkin. Harvard University Press. 452 Pages; Index; \$8.00. A systematic survey of the mineral resources, production and consumption position of the U.S.S.R.

- ALWAYS THE YOUNG STRAN-GERS. By Carl Sandburg. Harcourt, Brace and Company. 445 Pages; Index; \$5.00. The story of Carl Sandburg's interesting life.
- MAPS AND DIAGRAMS: Their Compilation and Construction. By F. J. Monkhouse and H. R. Wilkinson. E. P. Dutton & Co., Inc. 330 Pages; Illustrated; Index; \$6.00.
- THE OBSERVER'S BOOK OF SHIPS. By Frank E. Dodman. 192 Pages.
- THE OBSERVER'S BOOK OF AIR-CRAFT. By William Greene & Gerald Pollinger. Frederick Warne & Co., Inc. 280 Pages; Illustrated; Index; \$1.25 each.

Pocket-sized books published in England giving identification data and other information on their subjects.

- THE WONDERFUL WORLD OF IN-SECTS. By Albro Gaul. Rinehart & Company, Inc. 291 Pages; Illustrated; Index; \$4.00.
- THE STONES OF THE HOUSE. By Theodore Morrison. The Viking Press, Inc. 375 Pages; \$3.50.
- WHAT TO DO WHEN. By Jennifer Colton. Harper & Brothers. 234 Pages; \$3.00. Practical and entertaining answers to awkward everyday problems.
- THE RUSSIAN MIND: From Peter the Great Through the Enlightenment. By Stuart Ramsay Tompkins. The University of Oklahoma Press. 291 Pages; Illustrated; Index; \$4.00.
- BACK DOWN THE RIDGE. By W. L. White. Harcourt, Brace and Company. 182 Pages; \$3.00. Tracing the wounded from Korea to recovery.
- OUR LOVE AFFAIR WITH GER-MANY. By Hans Habe. G. P. Putnam's Sons. 247 Pages; \$3.00.
- THE NEW FORCE. By Ralph E. Lapp; Foreword by Stewart Alsop. Harper & Brothers. 238 Pages; Index; \$3.00. A look at the atom from the non-scientific point of view by the author of Must We Hide.
- THE AMERICAN THESAURUS OF SLANG, new edition. By Lester V. Berrey and Melvin Van den Bark. Thomas Y. Crowell Company. 1272 Pages; \$6.95. A second edition of what is now a standard book.
- ARCTIC SOLITUDES. By Admiral Lord Mountevans. Philosophical Library, Inc. 143 Pages; Illustrated; Index; \$4.50. A concise history of the expeditions, from Davis and Hudson to the present.
- THE ATOM STORY. By J. G. Feinberg. Philosophical Library, Inc. 243 Pages; Illustrated; Index; \$4.75. A layman's book on the atom.
- GENERALS AND ADMIRALS: The Story of Amphibious Command. By Capt. John Creswell, R.N. Longmans, Green and Co., Inc. 192 Pages; Maps; Index; \$4.00. Amphibious commands of the last 250 years.

ORDERS AND DIRECTIVES

A Manual for Commanders, Staff Officers and NCOs

By MAJOR ARTHUR M. CHESTER and MAJOR JOHN E. MURRAY

ORDERS AND DIRECTIVES tells you exactly how to prepare and issue orders, directives, letters and other forms of Army publications. You'll find all the tricks of the trade clearly explained, and the pitfalls and booby traps plainly marked with clear instructions on how to avoid them.

Every soldier will find valuable material here. The specialist will find that ORDERS AND DIRECTIVES, together with Major Chester's TECHNIQUE FOR ADJUTANTS, gives him a solid foundation of knowledge for better performance of his duties. \$3.00

TECHNIQUE FOR ADJUTANTS

BY MAJOR A. M. CHESTER

Here is a book you must have if you're an adjutant—a book you can use whether you're an adjutant's assistant or just a guy who has to fill out a form occasionally. TECHNIQUE FOR ADJUTANTS, by a man with 25 years' experience in the Corps, outlines the responsibilities of the job at any level—gives techniques, hints on management, ideas for organizing work. You'll never be mystified by paper work if you own a copy of TECHNIQUE FOR ADJUTANTS—and use it. Cloth, \$2.50 Paper, \$1.00

HANDBOOK AND MANUAL FOR THE NONCOMMISSIONED OFFICER

PARTIAL CONTENTS

LEADERSHIP
ORDERS
HOW TO TEACH
HOW TO STUDY
SOCIAL CONDUCT
SPIT AND POLISH
MILITARY JUSTICE
RELATIONSHIPS WITH YOUR MEN
HOW TO TRAIN YOUR MEN
PROMOTIONS AND REDUCTIONS
THINGS YOUR MEN WILL ASK YOU
PERSONAL AFFAIRS

Here is the book that tells you what to do—if you don't already know—how to do it, when to do it, and why to do it. And all this in clear, direct, exact language that is easy to read and leaves no room for doubt.

There is absolutely no padding in this big book, and every bit of information in it has been completely checked by experts for accuracy, clarity, and timeliness.

Check your PX for Handbook and Manual for the NONCOMMIS-SIONED OFFICER. Or, order direct from Combat Forces Book Service. Cloth, \$3.50 Paper, \$2.50

POSTMASTER: If this magazine is addressed to a member of the United States Military or Naval Service, whose address has been changed by official orders, it may be forwarded without additional postage, See Par. 10, Sec. 769. P. L. & R. Entered as second class matter at the Post Office at Washington, D. C. Additional Entry at Richmond, Va.

RETURN POSTAGE GUARANTEED BY THE

FROM DOWN UNDER TO NIPPON

The Story of Sixth Army In World War II

by General Walter Krueger



No United States army in World War II had a more difficult mission than Sixth Army, and none performed its mission with more distinction and less publicity. From Down Under to Nippon is the history of Sixth Army's operations, written by its commander. The book, like the army, reflects the personality of its commander—it is sound, accurate and professional. It is not General Krueger's autobiography; it is his tribute to the men who served with him.

You'll find this book a valuable addition to the history of World War II. Much of the material General Krueger gives you on the Philippines is in print nowhere else. You'll find, too, that From Down Under to Nippon is a very practical manual on joint operations. No other army in history mounted so many amphibious operations with such conspicuous success as did Sixth Army. You can see exactly how General Krueger used land, sea and air forces in such operations as Biak, Morotai, Admiralties, Wakde, Aitape, Hollandia, Cape Gloucester, Arawe and the Philippines.

Here, then, is the history of an army as professional as any we had in World War II, an army at the thin end of the supply line, an army that performed miracles on order and did so without fanfare. If you served in Sixth Army you'll certainly want this book. If you did not, you'll still want it for what it can show you about joint operations.

From Down Under to Nippon includes sixty maps, sixteen pages of pictures and a complete index.